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Triple P Procedure for morbidly adherent placenta: analysis of uterine remodeling after 6 weeks

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Introduction

The incidence of morbidly adherent placenta has increased recently reflecting the rise of caesarean deliveries .Placenta percreta is associated with significant maternal mortality and morbidity. Conservative management (intentional retention of placenta) and serial monitoring of BHCG may be associated with increased risk of sepsis and delayed hysterectomy due to secondary postpartum haemorrhage.

Triple P Procedure for morbidly adherent placenta involves peri-operative placental localization, pelvic devascularization , placental non separation and excision of the entire myometrium with morbidly adherent placenta and reconstruction of the uterine wall. The aim of this study was to assess the uterine remodeling in women who have undergone Triple P Procedure at six weeks post delivery and to assess the resorption of any morbidly adherent placental tissue that was left in situ (i.e. invading the bladder) at the time of surgery by sonographic and biochemical assessment.

Materials and Method

Retrospective analysis of twenty nine women who underwent Triple P Procedure between 2010-2014 at St George's Hospital, London. Serum BhCG was measured on the day of surgery and then on third postoperative day and at 6 weeks post delivery. All patients had a follow-up scan at six weeks postpartum where length of the uterine cavity, myometrial thickness and presence of retained placental tissue which was invading the urinary bladder and was intentionally left behind was assessed doing a transvaginal scan.

Results

Post operative assessment of uterine measurements revealed a remarkable remodelling capacity of a normal uterine cavity despite myometrial excision. Mean uterine endometrial cavity length was 9.2 ±S.D 5.3 cm,Mean Uterine Depth was 5.7 ±S.D 1.39 cm, Mean Uterine width was 5.9 ± S.D 1.38 cm ,Mean uterine cavity length was 6.61 ± 1.16 cm. anterior myometrial wall thickness was 23.72 mm ± S.D 9.08 and Mean posterior uterine wall was 24.52 mm ± S.D 9.75 .Out of 29 women only 8 had any evidence of placental tissue at 6 weeks (mean size 2.75 cm) but in all cases, posterior detrusor muscle of the uterine wall had completely reformed. None of the patients had sepsis or secondary postpartum haemorrhage that required a peripartum hysterectomy. Mean BHCG at delivery was 13273.34 ± S.D 9449.67.

Conclusion

Triple P Procedure is not only associated with a significant reduction in intra-operative bleeding with no cases of bladder injury, peripartum hysterectomy and a shorter hospital stay, out study shows endometrial cavity and posterior detrusor wall are sonographically normal with normal serum B-HCG after 6 weeks of the procedure. This suggests that the part of the placenta that invades the urinary bladder is spontaneously resorbed and is non-functional after 6 weeks

Key words: Cesarean section,Morbidly adherent placenta,Ultrasound remodelling.
Presenter name: Edwin Chandraharan

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Morbidly adherent placenta - hemorrhage control at a glance

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Introduction

The incidence of the morbidly adherent placenta is increasing worldwide, according to the rise in caesarean sections. Planned preterm cesarean hysterectomy with the placenta left in situ is still considered the reference treatment for placenta percreta. One of the main concerns during the operative procedure is the risk of severe hemorrhage. In order to reduce the morbidity associated with the morbidly adherent placenta several adjuvant therapies and different methods of treating this patients have been performed. Our objective was to provide sufficient evidence in order to make a possible comparison in terms of hemorrhage between each treatment described in the literature.

Materials and Method

We performed a review of the literature available from 1990 to December 2014 regarding blood loss associated with treatment of the morbidly adherent placenta.

Results

The review of the literature obtained a total of 52 articles fulfilling the inclusion criteria, with a total of 720 patients. The cesarean hysterectomy without any adjuvant therapy was the treatment with the greatest blood loss, with 9 articles, out of 13, reporting blood losses greater than 5L, with a maximum of 17L. Although the results were slightly better with the cesarean hysterectomy with occlusion balloons in the internal iliac arteries (5 articles out of 13 with blood losses greater than 5L), the morbidity was still very high with this technique, with reports of 15L of total blood loss. With the conservative treatment, leaving the placenta in situ, with or without adjunctive therapies to reduce blood losses, 3 articles out of 11 reported blood losses greater than 5L during the cesarean section, with a maximum of 16L. The uterine artery embolization was mainly performed as an adjuvant to conservative treatment (leaving placenta in situ), with only 2 articles (out of 12) reporting blood losses greater than 5L. Lastly, regarding the cesarean hysterectomy with balloon occlusion of the common iliac arteries (4 studies, 9 patients, one case with blood loss greater than 5L) and the conservative surgery - resection of the affected myometrium (3 articles, 91 patients, none with blood loss greater than 5L), although the results look attractive, the literature available is still scarce to provide definitive conclusions.

Conclusion

Notwithstanding the efforts made to reduce the morbidity of the placenta accreta the results are still far from the ideal. The best results seem to be with the uterine artery embolization when performing a conservative procedure, with the cesarean hysterectomy with balloon occlusion of the common iliac arteries and the conservative surgeries providing encouraging results. Nonetheless, it is still important to take into consideration other variables (like infectious complications, technical skills, available equipment, long-term follow-up, future pregnancy desire) when choosing the best treatment in each centre.

Key words: morbidly aherent placenta; postpartum hemorrhage; intravascular balloon catheter; uterine artery embolization

Presenter name: Pedro Viana Pinto

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Patient decision aid with individual risk estimation: an effective tool in choosing the mode of delivery after cesarean section

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Introduction

International guidelines indicate that when no contra-indication for vaginal birth after cesarean (VBAC) exists, women pregnant after a previous cesarean section (CS) should be able to choose between an intended VBAC or an elective repeat cesarean section (ERCS). Although in the Netherlands the majority of women opt for intended vaginal delivery, previous studies showed that in many cases women were not adequately informed about their options. We developed a patient decision aid (DA) aiming to increase guideline adherence in counseling women pregnant after CS and to enhance patient involvement in decision making while not leading to an increase in CS rate.

Materials and Method

Women pregnant after one previous CS without a contra-indication for an intended VBAC were enrolled in six matched pairs of hospitals. Women in the intervention hospitals received a DA, including both information on benefits and risks of intended VBAC and ERCS and a prediction model to calculate the individual VBAC probability. Counseling in the control hospitals was performed according to usual care. The hypothesis was that the use of a DA did not lead to a decrease in VBAC rate. The VBAC rate in the period before the study started was 48%. A difference of >10 % was considered 'inferior' care. The sample size needed was 400 per study arm.

Results

We included 920 women of whom 479 were enrolled in the intervention group and 441 in the control group. In total 256 women filled in a questionnaire on decision making: in the intervention group 133 of 137 women (98%) stated they were involved in the choice for the mode of delivery, as compared to 78 of 119 women (68%) in the control group (p< 0,001). The total VBAC rate was comparable (215 (45%) vs. 201(46%)). In the intervention group more women chose an ERCS (195 (41%) vs. 133 (30%), p= 0.001). In the intervention group, 215/280 women attempting VBAC delivered vaginally (77%), compared to 201/307 women in the control group (65%) (p= 0, 01). Consequently, 10% more emergency CS were performed in the control group. After correcting for confounders, the odds ratio for an emergency CS in the intervention group (13%) compared to the control group (23%) was 0.51 (95% confidence interval 0.30-0.86).

Conclusion

Implementing a decision aid for mode of delivery after CS results in improved patient involvement, an unchanged VBAC rate but better risk selection with a 50% reduction in the emergency CS rate.

Key words: birth after cesarean section, decision aid
Presenter name: E. Vankan

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Elevated Amniotic Fluid Lactate at Diagnosis of Spontaneous Labor predicts Dystocia and Caesarean Section in Single Cephalic Nulliparous Women after Term ≥ 37 weeks gestation

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Introduction

The purpose of this study was to assess amniotic fluid lactate (AFL) at diagnosis of spontaneous labor at term (≥37 weeks) as a predictor of dystocia and cesarean section (CS).Dystocia is the most common indication for cesarean section in nulliparous women. We present a large cohort of women in spontaneous labour at term where elevated amniotic fluid lactate levels at the diagnosis of labour were an independent predictor of dystocia and caesarean section).

Materials and Method

A single institution, prospective cohort study of 905 singleton, cephalic, term (37 weeks or later) nulliparous women in spontaneous labor. A standard management of labour (Active Management of Labor) including a standard oxytocin regimen up to a maximum dose of 30mu/min was applied. AFL was measured using a point of care device (LMU061 ObsteCare, Sweden). Dystocia in the first stage of labor was defined as the need for oxytocin when cervical dilatation was less than 1cm/hr over 2hrs and in the second stage of labor by poor descent and rotation over 1hr. Standard statistical analysis included ANOVA and Pearson's correlations and binary logistic regression. Unsupervised decision tree analysis with 10 fold cross validation was used to identify AFL thresholds.

Results

Results:

AFL was normally distributed and did not correlate with age, BMI or gestation. Unsupervised decision tree analysis demonstrated that AFL could be divided into three groups 0 – 4.9 mmol/l (n=118), 5 - 9.9 mmol/l (n=707) and ≥ 10 mmol/l (n=80). Increasing AFL was associated with higher total oxytocin dose (p=0.001), dystocia (p=0.005) and CS (p= 5 mmol/l (OR-1.6, 95%CI 1.06 -2.39) and AFL ≥ 10 mmol/l (OR-1.72, 95%CI 1.01-2.93) were independent predictors of dystocia. AFL > 5 mmol/l did not predict CS.AFL > 5 mmol/l had a sensitivity of 89% in predicting dystocia and a sensitivity of 93% specificity in predicting CS with a 97% negative predictive value.Multivariate analysis confirmed AFL ≥ 10 mmol/l was an independent predictor of CS (OR-3.35, 95%CI 1.73–6.46), sensitivity 23% specifity 92% negative predictive value 94% overal accuracy . AFL ≥10 mmol/l was highly specific but lacked sensitivity for CS.

Conclusion

AFL at diagnosis of labor in spontaneously labouring single cephalic nulliparous term women is an independent predictor of dystocia and caesarean section. These data suggest that women with AFL between 5-10 mmol/l with dystocia may be amenable to correction using the Active Management of Labor protocol.

Key words: Amniotic Fluid Lactate, Active Management of Labor, Cesarean Section, Dystocia

Presenter name: Martina Murphy

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WORK-RELATED ADVERSE EVENTS LEAVING THEIR MARK: A SURVEY AMONG DUTCH GYNAECOLOGISTS

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Introduction

Health care providers cope with work-related adverse events on a daily basis: patients dying, surgeries being unsuccessful, repeatedly conveying bad news, missing a diagnosis. Although priority is caring for patients, health care providers can be 'second victims', with feelings of guilt, anger, frustration and distress, and may even consider giving up their practice. Repeatedly coping with adverse events increases the risk of psychological distress, traumatic experiences and posttraumatic stress disorder (PTSD). Unlike hospital physicians, first responders (police officers, firefighters, and paramedics) are known risk groups and often have organized support. How do adverse events affect us and our work, and what support is available and desired?

Materials and Method

All 1578 members of the Dutch Society of Obstetrics & Gynaecology received an invitation to participate by email. The online questionnaire consisted of 47 questions about demographics, personal experiences and opinions about (support following) adverse events. Additionally, two self-report screening questionnaires for depression and anxiety (Hospital Anxiety and Depression Scale (HADS)) and PTSD ((Trauma Screening Questionnaire (TSQ)) were included.

Results

The response rate was 43.3%, with 683 residents, attending (consultant), not-practicing and retired gynaecologists taking part. The most emotionally distressing moments were missing a diagnosis, doubting a decision, and moments when patient's life is at risk. Over the course of their career, 21% dealt with a formal complaint at the disciplinary board.

Prevalence rates of depression and anxiety were 5% and 11%, respectively. 12.8% experienced at least one traumatic event during work, and the prevalence of current PTSD is estimated at 1.5%. 59% of those who scored below the TSQ cut-off for PTSD recognized symptoms from a prior period. Traumatic events reported could be categorized in death of a patient (perinatal, maternal or not-pregnancy related), complications (e.g. postpartum haemorrhage), aggression and interpersonal conflicts at work.

As a result of adverse events, more than half of the gynaecologists became more defensive during work, and one in four adapted their work circumstances, or considered giving up practice. Support from colleagues is the most common and most desired type of support, but few have learned how to cope with adverse work-related events during medical school, specialty training or professional development courses. Most people report formal trauma protocols to be absent or unknown. Support after adverse events is found to be insufficient.

Conclusion

Work-related adverse and traumatic events can take an emotional toll on gynaecologists, resulting in psychological distress and a more defensive attitude. Support after adverse events is found to be insufficient, with lack of protocols and education. The results will lead to an advice towards the Dutch Society of Obstetrics & Gynaecology, and improvement of support after adverse events for Dutch gynaecologists.

Key words: second victim, health care provider, gynaecologists, adverse events

Presenter name: M. Baas

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A new treatment of labor dystocia

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Introduction

Labor dystocia is one of the largest and most high-profile issues in obstetric care. Dystocic deliveries affect about 20% of all deliveries. At the moment, oxytocin is the only available treatment. Studies have shown that the AFL value (amniotic fluid lactate) gives important information about the metabolic status of the uterus, and high AFL levels have a strong association to an arrested labor progress with associated complications.

In sports medicine it is known that the levels of lactic acid in the body can be affected and decreased by bicarbonate given orally before vigorous physical activity.

Aims of this study were to investigate if an oral intake of bicarbonate improves condition of stimulation and enhance delivery outcome in dystocic deliveries.

Materials and Method

A RCT study of 200 dystocic deliveries with arrested labor according to the partogram was performed at South Hospital of Stockholm.

A sample of amniotic fluid was collected vaginally when oxytocin was needed for stimulation, and the AFL-value was analyzed blinded immediately at the bedside. A maternal venous blood sample was collected for analyze of the maternal acid-base status. In 100 of the 200 deliveries two bags of Samarin® (bicarbonate) was mixed in a glass of water and ingested by the woman. After one hour, another sample of AFL and blood was collected and stimulation with oxytocin was started if still no progress of labor was identified. In 100 of the 200 stimulation with oxytocin started immediately after the first sampling. Data was collected from medical files after delivery.

Results

The level of AFL fell significantly between the two measurement occasions in the group where Samarin® has been taken orally before augmentation, this in comparison of the untreated group where the AFL-value contrary rose (-0,6mmol/l/+0.6mmo/l).

Also the level of lactate in maternal blood fell in the Samarin® group compared to the untreated group (-0.4mmol/l/+0.3 mmol/l).

The frequency of spontaneous vaginal deliveries was higher in the group where Samarin® has been taken (88% vs 83%, p=0.04).

No difference in fetal outcome was shown between the two groups.

Conclusion

The level of AFL as well as the lactate level in maternal blood decreases among women who received Samarin®.

The frequency of spontaneous vaginal delivery after augmentation was increased without affecting the fetal outcome in the Samarin® group.

It is hoped that the results from this work will provide us with a useful tool when augmentation with oxytocin is needed in the future.

Key words: Labor dystocia, bicarbonate, vaginal delivery

Presenter name: Eva Wiberg-Itzel

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THE ROLE OF MATERNAL PHYSICAL EXERCISE ON SPONTANEOUS LABOR ONSET – A RANDOMIZED CLINICAL TRIAL

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Introduction

Maternal physical exercise is empirically recommended with the purpose of enhancing labor. However there is no evidence on medical literature to support this recommendation.

The objective of this study was to evaluate the effects of the practice of maternal physical exercise on the term of pregnancy as a method to enhance spontaneous labor.

Materials and Method

At 38 weeks low-risk pregnant women, with singleton cephalic fetus and without previous cesarean delivery, were randomized into 2 groups: a control group without maternal physical exercise practice and a study group with 30 minutes of walking, 3 times a week at 4 Km/h. Induction of labor was performed at 41 weeks. Demographic data, gestational age on the onset of spontaneous labor, need for induction, duration of active stage and delivery type were analyzed. Statistical analysis included T-test and $\chi 2$ for $p<0.05$.

Results

87 cases were enrolled in the study (44 on the control group and 43 on the study group). There was no statistically significant difference between the groups with regard to maternal age, number of previous vaginal deliveries, Bishop index at inclusion and gestational age on spontaneous labor onset. The rate of labor induction was significantly lower in the study group (23.3% vs 38.6%, p=0.02). In the study group there was also a significant reduction on the duration of the active stage (5.7h vs 9.5h, p=0.001) and a lower cesarean section rate (11.6% vs 27.3%, p=0.02).

Conclusion

Maternal exercise was associated with lower rates of labor induction, cesarean section and duration of active stage, but there was no association with the onset of spontaneous labor.

Key words: physical exercise; spontaneous labor; labor induction

Presenter name: Isabel Barros Pereira

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Mechanical vs. pharmacological methods for labour induction: Impact on pain perception and satisfaction

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Introduction

Induction of labour is one of the most common obstetric interventions, with significant impact on the individual woman`s experience with labour. It is well known that artificially induced labour results in lower satisfaction rates in comparison to that following spontaneous onset [1].

The aim of this study was to investigate different types of methods for labour induction in women beyond 41 weeks of pregnancy. Our focus was on women's tolerance (pain perception) and satisfaction with different methods for labour induction. The only method used in our clinic until this study was pharmacological method using PGE2 vaginal tablets.

Materials and Method

We conducted an open-label randomized controlled trial. A total of 106 women with a singleton pregnancy in cephalic presentation, intact membranes, unfavourable cervix (Bishop score ≤ 5), and no prior caesarean section was randomized to one of three induction methods: prostaglandin PGE2 vaginal tablets (PGE2), Foley catheter (FC), or double-balloon catheter (DBC). The only indication for induction was pregnancy length ≥ 41 weeks.

The studied outcomes included induction-to-delivery interval, caesarean section rate and maternal and neonatal morbidity.

Additionally, we evaluated women`s pain perception with visual analogue scale (VAS, from 0-no pain to 10-very severe pain) during insertion of vaginal tablet or catheter (VAS-ins) and during induction- cervical ripening (VAS-ind). Overall labour experience satisfaction was also evaluated (from 1-least satisfied to 5-most satisfied). After childbirth, standardized questionnaire was given to all of the women for them to complete before discharge.

Results

We analyzed 105 women: 36 received PGE2, 35 FC and 34 DBC. No significant differences were found between the groups in induction-to-delivery time (PGE2 29.47h, FC 30.89h, DBC 29.56h, P = .937) and caesarean section rates (PGE2 33.3%, FC 28.6%, DBC 41.2%, P = .538). We also observed no significant differences in maternal or neonatal morbidity.

Analyzing questionnaires we realized that VAS-ins was significantly lower in PGE2 group (1.65), comparing to FC and DBC group (3.30 and 2.41), P= .007, but VAS-ind was significantly lower in FC and DBC group (3.33 and 2.65) than in PGE2 group (5.62), P= .000. Satisfaction evaluation was comparable in all three groups (PGE2 4.41, FC 4.15, DBC 4.24), P = .265.

We noticed improvement in satisfaction rate in FC and DBC group during the study. Significantly more women were satisfied in DBC group at the end of the study when comparing it to the beginning (P= .001). We did not detect a significant difference in FC group (P= .491). We also noticed decrease in VAS-ins in FC and DBC group, but with no significant difference (P= .852 and P= .076).

Conclusion

Our study shows no differences in effectiveness and safety of induction of labour with PGE2, FC and DBC. However, there are some advantages of mechanical when comparing to pharmacological method, especially due to its manageable and less painful cervical ripening. These findings should be considered when choosing an appropriate method for labour induction.

Secondary findings show an increase of patient satisfactory correlates to experience of medical staff in managing labour after newly introduced mechanical method of induction. With introducing this method as a standard practice we expect patient satisfactory to continue in its increase.

Key words: labour induction, Foley catheter, double balloon catheter, PGE2, labour experience satisfaction

Presenter name: Polona Pečlin

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FM-ALERT: a randomised clinical trial of intrapartum fetal monitoring with computer analysis and alerts versus previously available monitoring.

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Introduction

Cardiotocography (CTG) is widely used for intrapartum fetal monitoring, but its interpretation has limited interobserver agreement and the technology has not been shown to improve clinically important outcomes. Computer analysis incorporating real-time alerts for healthcare professionals has recently been developed as a reproducible alternative. This study was conducted to determine whether the use of this technology resulted in improved perinatal outcomes or reduced intervention rates.

Materials and Method

This multicentre randomised clinical trial was carried out in five hospitals in the United Kingdom. Inclusion criteria were: women aged ≥16 years, able to provide written informed consent, singleton pregnancies ≥36 weeks, cephalic presentation, no known major fetal malformations, in labour but excluding active second stage, planned for continuous CTG monitoring, and no known contra-indication for vaginal delivery. Eligible women were randomised using a computer-generated sequence to one of two arms: computer analysis of fetal monitoring signals with real-time alerts using the Omniview-SisPorto® 3.5 system (Speculum®, Lisbon, Portugal) or CTG monitoring as previously performed (control arm). ST analysis and fetal scalp blood sampling were available in both arms. The primary outcome was the incidence of newborn metabolic acidosis (valid paired samples with umbilical artery pH < 7.05 and BDecf >12 mmol/L). Secondary outcomes were cesarean section rates, instrumental vaginal delivery rates, use of fetal blood sampling, 5-minute Apgar score < 7, neonatal intensive care unit admission, moderate and severe neonatal hypoxic-ischemic encephalopathy and perinatal death. Analysis followed an intention to treat principle.

Results

A total of 7759 cases were enrolled, 3977 were randomised to the experimental arm and 3782 to the control arm. Twenty-one cases were lost to follow-up (0.27%) and 43 patients opted out of the study before birth (0.55%). Of the remaining 7695 cases, valid cord gases were available in 87.0%. No significant differences in baseline characteristics occurred between the two groups. Newborn metabolic acidosis occurred in 0.51% of cases in the experimental arm and 0.72% of those in the control arm (RR=0.70 [0.39-1.25]). No significant differences between the groups were found in cesarean section rates (20.4% vs. 20.5%, RR=0.99 [0.91,1.08]), instrumental vaginal delivery rates (31.7% vs. 29.6%, RR=1.07 [1.00-1.14], random effects model RR=1.02 [0.88-1.17]), use of fetal blood sampling (6.0% vs. 5.6%, RR=1.09 [0.91-1.30]), 5-minute Apgar score < 7 (1.2% vs. 1.4%, RR=0.84 [0.57-1.24]), neonatal intensive care unit admission (3.4% vs. 3.7%, RR=0.91 [0.721-1.15]), moderate and severe neonatal hypoxic-ischemic encephalopathy (0.13% vs. 0.03%, RR=4.74 [0.55-40.60]), or perinatal death (0.05% vs. 0%).

Conclusion

Access to computer analysis of CTG resulted in the lowest incidence of newborn metabolic acidosis ever reported in randomized controlled trials, but the difference was not statistically significant. The incidence of the primary outcome was much lower than expected, suggesting that the study was underpowered to detect such differences. Intervention rates were similar in both arms.

Key words: cardiotocographic (CTG) monitoring; intrapartum monitoring; computer analysis; real-time alerts; fetal metabolic acidosis; adverse perinatal outcomes; intrapartum interventions.

Presenter name: Inês Nunes (I. Nunes)

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FETAL ECG (STAN): HOW RELIABLE IS IT? SENSITIVITY, SPECIFICITY AND POSITIVE AND NEGATIVE PREDICTIVE VALUES FOR NEONATAL ACIDOSIS

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Introduction

ST-Analysis (STAN) is used as an adjunct to cardiotocograph (CTG) to reduce false positive rates of CTG.
Study Objectives:
To calculate the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) of STAN

Materials and Method

A retrospective analysis of data on all high risk women monitored using STAN during labour at St George's Hospital, London between 2009 and 2013 was carried out. Cases with significant STAN events requiring intervention were identified. Neonatal outcome was analysed in two groups: women who developed significant STAN events and those who did not have significant STAN Events. Sensitivity, specificity, PPV and NPV of STAN for prediction of poor neonatal outcome in terms of the criteria below, were calculated.
Outcome measures:
5 minute Apgar score < 7
Cord arterial pH < 7.05
Cord arterial base deficit > 12
Hypoxic ischemic encephalopathy (HIE)

Results

26300 women delivered at St George's Hospital between 2009 and 2013. 11094 (42.2%) were monitored by STAN during labour and data was available for analysis for 8976 women.
Within the sample analysed, umbilical cord arterial pH was less than 7.05 in 142 (1.6%) cases and 190 (2.1%) had an arterial base deficit of more than 12. Overall, 26 cases (0.3% of the sample of 8976 and 0.1% of total deliveries) developed hypoxic ischaemic encephalopathy (HIE).
Out of 8976 women, 1763 (19.6%) developed significant STAN events requiring intervention. Of these, 63 (3.6%) had a cord arterial pH of less than 7.05 and 63 (3.6%) had an arterial base deficit of more than 12. There were 13 cases of HIE (0.7%) when there was a significant STAN event in labour.
Using a significant STAN event as a 'positive' test, the sensitivity of STAN for prediction of neonatal acidosis (cord arterial pH of less than 7.05) was 47.7% and the specificity 80.2%. The PPV of STAN for neonatal acidosis was 3.52% and the NPV 99.01%
The sensitivity and specificity of STAN for prediction of cord arterial base deficit of more than 12 were 35.2% and 80.1%, respectively. The PPV and NPV were 3.57% and 98.33%, respectively.
The sensitivity and specificity of STAN for prediction of HIE were 50% and 79.9%, respectively. The PPV and NPV were 0.74% and 99.81%, respectively.

Conclusion

STAN has a sensitivity and specificity of 35.2 and 79.9% in predicting adverse neonatal outcomes with a PPV of 3.52% and a NPV of 98.81%. This indicates that even in the presence of a 'Significant STAN Event', the risk of neonatal metabolic acidosis is very low. Conversely, in the absence of significant STAN Events, the NPVs for neonatal acidosis and HIE were 98.3% and 99.8%, respectively.
The false positive rate of STAN for prediction of adverse neonatal outcome is 19% which is much lower than the 60-90% quoted for CTG alone. This suggests that using STAN reduces unnecessary interventions. False negative rates when using STAN are between 0.1 and 1.2%, suggesting that it is a safe method of intrapartum monitoring when guidelines are followed.

Key words: Fetal ECG; STAN; intrapartum fetal monitoring; neonatal acidosis; sensitivity; specificity; positive predictive value (PPV); negative predictive value (NPV); hypoxic ischaemic encephalopathy
Presenter name: Dr Ayona Wijemanne

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Severe adverse maternal outcomes among women in primary versus secondary care at the onset of labour in the Netherlands: a nationwide cohort study

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Introduction

Previous studies, found no increased risk of adverse perinatal or maternal outcomes among planned home versus planned hospital births for women in primary care at the onset of labour. However, these studies did not answer the question whether start of labour in primary care, regardless of planned place of birth, leads to a higher rate of adverse outcomes compared to start of labour in secondary care.

In this study we test the hypothesis that it is possible to select a group of low risk women who can start labour in primary care without having increased rates of severe adverse maternal outcomes compared to women who start labour in secondary care.

Materials and Method

We conducted a nationwide cohort study in the Netherlands, using data from 223 739 women with a singleton pregnancy between 37 and 42 weeks gestation without a previous caesarean section, with spontaneous onset of labour and a child in cephalic presentation. Information on all cases of severe acute maternal morbidity collected by the national study into ethnic determinants of maternal morbidity in the Netherlands (LEMMoN study), 1 August 2004 to 1 August 2006, was merged with data from the Netherlands perinatal register of all births occurring during the same period.

Our primary outcome was severe acute maternal morbidity (SAMM, i.e. admission to an intensive care unit, uterine rupture, eclampsia or severe HELLP, major obstetric haemorrhage, and other serious events). Secondary outcomes were postpartum haemorrhage and manual removal of placenta.

Results

Nulliparous and parous women who started labour in primary care had lower rates of SAMM, postpartum haemorrhage and manual removal of placenta compared to women who started labour in secondary care. For SAMM the adjusted odds ratio's and 95% confidence intervals were for nulliparous women: 0.57 (0.45 to 0.71) and for parous women 0.47 (0.36 to 0.62).

Conclusion

Our results suggest that it is possible to identify a group of women at low risk of obstetric complications who may benefit from midwife-led care. Women can be reassured that we found no evidence that midwife-led care at the onset of labour is unsafe for women in a maternity care system with a good risk selection and referral system.

Key words: Maternal Morbidity, Maternal Mortality, SAMM, Primary care
Presenter name: Jeroen van Dillen

025

SHOULDER DYSTOCIA IN PRIMARY MIDWIFERY CARE IN THE NETHERLANDS

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Introduction

Shoulder dystocia is a severe and highly unpredictable complication of vaginal births. To resolve shoulder dystocia a variety of manoeuvres can be applied among which the all-fours manoeuvre. Despite limited evidence, the all-fours manoeuvre has been adopted into guidelines and is taught in most current obstetric emergency courses. In the Netherlands low risk pregnancies and births are usually managed by midwives in primary care. When so, women are provided with the choice to give birth at home or in a birthing clinic. Approximately 21% of all births take place at home. Midwives seldom encounter uncommon labour complications, but are sufficiently trained to manage these. Our objective was to assess management and outcome of shoulder dystocia in primary midwifery care in the Netherlands.

Materials and Method

In this two year cohort study, participating midwives of an obstetric emergency course reported on encountered births complicated by shoulder dystocia, from April 2008 to April 2010. Participants monthly received an email linked to case report form. Furthermore, anonymous medical records were requested. Our main outcome was intrapartum management and neonatal outcome.

Results

Sixty-four cases of shoulder dystocia were reported. Of all cases 70.3% were homebirths and 29.7% took place in a birthing clinic. McRoberts manoeuvre was the first manoeuvre in 42/64 (65.6%) cases and had a success rate as first-line treatment of 23.8%. When the all-fours manoeuvre was used as first-line treatment, success rate was 29.4%. The all-fours manoeuvre was most frequently used as second manoeuvre (24/45; 53.3%). No neonatal mortality occurred, none of the infants suffered from hypoxic ischaemic injury, two (3.1%) had a transient brachial plexus injury, two (3.1%) a fractured clavicle and one (1.6%) a fractured humerus. Eight (12.5%) neonates were successfully resuscitated because of birth asphyxia. All infants fully recovered. In the group of neonates with adverse neonatal outcome significantly more manoeuvres were used compared to the group without adverse neonatal outcome (P=0.02).

Conclusion

The all-fours manoeuvre is widely used by primary care midwives in the management of shoulder dystocia. Low rates of adverse neonatal outcomes were observed in cases of shoulder dystocia in primary midwifery care in the Netherlands.

Key words: Shoulder dystocia, primary midwifery care, all-fours manoeuvre, homebirth
Presenter name: Athanasios Kallianidis

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USE OF ACUPUNCTURE TO AVOID UTERINE ATONY

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Introduction

The promotion of uterine contraction is a major objective of the management of the third stage of labor, as postpartum hemorrhage (PPH) occurs in 60-80% of cases of uterine atony. The length of the third stage is related to the contraction of the uterus, which is responsible for expelling the placenta and ending maternal bleeding. A prolonged third stage of labor (more than 30 min) is associated with PPH. Reducing the average length of the third stage might reduce the incidence of prolonged third stage, thereby minimizing the risk of complications.

Acupuncture uses thin needles to penetrate the skin at certain points on the body. According to acupuncture principles, the stimulation of the Ren Mai 6 point is supposed to induce the contraction of the uterus. In order to determine the influence of acupuncture on this point in the length of the third stage we carried out a single-blind randomized clinical trial evaluated by a third party.

Materials and Method

Seventy-six puerperal women who had a normal spontaneous birth at the Hospital Universitario Principe de Asturias, Alcalá de Henares, Spain, were included in the trial. Three midwives responsible for conducting the study were trained in the acupuncture technique during a 3-hour seminar. Mothers were randomly assigned to receive true acupuncture or placebo acupuncture (also known as sham acupuncture). In the first group, a sterilized steel needle was inserted at the Ren Mai 6 point, which is located on the anterior midline between the umbilicus and the upper part of the pubic symphysis. In the second group, the insertion site was located at the same horizontal level as the Ren Mai 6 point but shifted slightly to the left of the anterior midline. The management of the third stage of labor was the same in both groups.

Results

The mean time to placental expulsion was found to be significantly different between the two groups: 5.23 minutes and 15.21 minutes for the intervention and control groups, respectively. Thus, there was a 9.28 minute difference in the average time of the two groups. The 95% confidence interval for the true mean value of the expulsion time were 12.70-17.71 for the control group and 4.69- 5.82 min for the intervention group. This suggests a statistically significant difference of at least 7.71 minutes in the average duration of the third stage of labor between the two groups. No major complications occurred in either group.

Conclusion

Training midwives to accurately place an acupuncture needle was relatively easy, and results confirm that acupuncture at the Ren Mai 6 point can decrease the time to placental expulsion. This treatment represents a simple, safe and inexpensive way of decreasing the duration of the third stage of labor, being of special interest in underdeveloped countries where resources for the treatment of complications are limited.

Key words: Acupuncture; Third Stage of Labor; Postpartum Hemorrhage; Uterine Atony
Presenter name: Beatriz Lopez-Garrido

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A randomised trial of Carbetocin versus Oxytocin in the management of the third stage of labour.

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Introduction

Postpartum hemorrhage (PPH) still is a significant cause of maternal morbidity and mortality. Uterotonic medication is the main part of active management of the third stage of labor – most effective preventive measure of PPH. Oxytocin is the uterotonic agent of choice, but over last year's alternative medications have been introduced into practice. Oxytocin agonist - carbetocin appears to be the most promising for this indication.

Aim of this study is to compare the effectiveness of carbetocin and oxytocin when they are administered for prevention of postpartum haemorrhage (PPH).

Materials and Method

Population: Women with term singleton pregnancy with no contraindication for vaginal delivery recruited between January 2013 and December 2014.

Methods: One hundred and eleven eligible women were randomised to receive either a single dose of 100 microgram IM carbetocin immediately following delivery of the placenta or 2 ml (10IU) IM oxytocin upon delivery of the anterior shoulder of the baby.

Main outcome measures: Primary outcome measures were the incidence of postpartum haemorrhage (500ml and more), estimated blood loss, change in haemodynamics (1,5,30min after injection) and haemoglobin (at onset of labor and 48 hours postpartum), adverse effects profile. Secondary outcome measures included frequency of transfusion requirements, retained placenta and use of additional uterotonics.

Results

Two of 58 women in the carbetocin group (3.4%) and three of 53 in the oxytocin group (5,7%) had postpartum haemorrhage ($p>0,05$). Average estimated blood loss (including PPH) during first 2 hours after delivery of the baby was 213,96±113,32ml and 276,59±180,42ml, respectively ($p<0,05$). After exclusion of PPH cases adjusted still remained lower in carbetocin group 201,96±95,07ml vs 240,42±81,36ml ($p<0,05$).

There was no difference in the level of systolic blood pressure between groups, diastolic was slightly, but significantly, lower during first minute after carbetocin injection, 68,94±10,63 versus 75,62±12,15 in oxytocin group.

Despite of no difference of mean blood haemoglobin level within the first 48 hours between the two groups postpartum, the drop of haemoglobin concentration more than 10% from antepartum level more frequently seen after use of oxytocin, 14,0% vs 45,0% ($p<0,005$).

The use of carbetocin was associated with significant lower incidence of shivering, 3,4% vs 20,7% (p0,05). There were no significant differences in the secondary outcomes including transfusion requirements, retained placenta and use of additional uterotonics.

Conclusion

100 microgram IM carbetocin following delivery of the placenta is more effective than 10IU of IM oxytocin upon delivery of the anterior shoulder of the baby in limitation of blood losses and prevention of postpartum anemia. Carbetocin has haemodynamics effects similar to oxytocin, but is associated with less adverse effects.

Key words: postpartum hemorrhage, carbetocin, oxytocin
Presenter name: Oleg Baev

POSTER PRESENTATIONS

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SEVERE AND FATAL OBSTETRIC INJURY CLAIMS IN RELATION TO LABOUR UNIT VOLUME IN DENMARK

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Introduction
Fortunately severe adverse outcomes due to medical errors in obstetrics are rare, yet, when they occur, the consequences may be devastating for the involved families. More than one million deliveries took place in Denmark over the past 18 years, and although outcomes for the large majority are good, one may argue that one adverse outcome due to sub-standard treatment is one too many. The purpose of this study is to assess any association between the incidences of approved claims for severe and fatal obstetric injuries and delivery volume in Denmark.

Materials and Method
Claimants seeking financial compensation due to injuries occurring at Danish labour units 1995-2012. Exposure information regarding the annual number of deliveries per labour unit was retrieved from the National Birth Registry. Outcome information was retrieved from the Danish Patient Compensation Association. Exposure was categorized in delivery volume quintiles as annual volume per labour unit: [10 - 1377], [1378 - 2016], [2017 - 2801], [2802 - 3861], [3862 - 6659]. Five primary measures of outcome were used. Incidence-rate-ratios of A: Submitted claims, B: Approved claims, C: Approved severe injury claims (120% degree of disability), D: Approved fatal injury claims, and C+D combined.

Results
1.151.734 deliveries in 51 labour units and 1872 submitted claims were included. The Incidence-rate-ratios of approved claims overall, of approved fatal injury claims, and of approved severe and fatal injuries combined increased significantly with decreasing annual delivery volume. Face value Incidence-rate-ratios of approved severe injuries increased with decreasing labour unit volume, but the association did not reach statistical significance.

Conclusion
High volume labour units appear associated with fewer approved and fewer fatal injury claims compared to units with less volume. The findings support the development towards consolidation of units in Denmark. A suggested option would be to tailor obstetric patient safety initiatives according to labour units' delivery volume.

Key words: insurance claim review, obstetrics, patient safety, health facility size, delivery volume
Presenter name:Maria Milland

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Assessment of obstetric-teams' non-technical skills in the management of postpartum hemorrhage using actual care video recordings

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Introduction

Team processes and performances are essential in the management of obstetric emergencies such as postpartum hemorrhage (PPH): Non-technical skills (NTS), based on Crew Resource Management (CRM), and structured ABC-evaluation from ATLS, are known to increase team performances and patient safety due to shared mental models. We evaluated NTS in the Netherlands using video recordings of obstetric teams managing PPH in the actual care

Materials and Method

In an observational multi-centre study, video recordings of the third stage of labor in women with a high risk of PPH were used. These recordings were made in 12 Dutch hospitals. Recordings of patients with PPH were selected. The videos were assessed by two independent researchers using validated list; the "Clinical Teamwork Scale" (CTS) for teamwork and communication and the "Ottowa Crisis Resource Management global rating scale: non technical skills" (CGR) for leadership and ABC-evaluation

Results

59 videos were included. On the CTS-scale, teams scored moderate for overall team communication (44 of 90 points) (table). Structured information transfer (S-BAR) and closed loop communication, both scored insufficient (median 3 (IQR 2-8)). Transparent thinking and target fixation scored above average (median 6 (IQR 2-8)). ABC-evaluation (CGR) was seldom applied (median 2 (IQR 1-5)). The teams scored remarkably well on all leadership-skills. There was a strong correlation between team communication and leadership (r^2 0,74, $p < 0,05$). No correlation was found between team communication and the amount of blood loss (r^2 0,04, $p = 0,76$) (fig)

Conclusion

Non-technical skills of the Dutch obstetric teams in the management of PPH are moderate, with a lowest score on structured information transfer and highest on leadership. ABC-evaluation is not integrated in the obstetric emergency care routine. Improving team performance by up scaling NTS through skills-training may be an important part of the overall strategy to improve PPH-care

Key words: non technical skills, communication, post partum hemorrhage

Presenter name:Nicole Snaphaan

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Effectiveness of ice pack for postpartum perineal pain management: A randomized controlled trial

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Introduction

After normal birth, perineal pain can berelieved by applying an ice pack to the perineum for 20 minutes; however, there is limited evidenceif perineal pain is also alleviated by applying ice pack for shorter period of time. This study aimed to evaluate the effectiveness of ice pack application for 10 min in alleviating postpartum perineal pain.

Materials and Method

A randomised controlled blind trial undertaken with 69 postpartum women aged ≥18 years, with no previous vaginal delivery, perineal pain ≥3 as indicated using Numerical Rating Scale (NRS) from 0 to 10, between 6 and 24hs after birth, who had not received anti-inflammatory drugs or cryotherapy in the first 24hs after birth and analgesic medication within the previous 3hs. The participants were stratified according to the birth-related perineal trauma severity: intact perineum/1st degree tears and 2nd degree tears/episiotomy. The random allocation occurred separately in each stratum. Women in the experimental group (n=35) received a single application of ice pack to the perineum for 10min. To the control group (n=34), the standard care was delivered. Perineal pain levels were explored by using the NRS before and immediately after the intervention. Pain on activities was recorded as 'yes' or 'no' and intensity measured using a VAS of 0-10 (0=absence and 10=maximum interference). The primary outcome was reduction ≥30% in the perineal pain score.

Results

Immediately after applying ice pack, the experimental group experienced significantly lower perineal pain levels ($p<0.001$), compared to the control group.In average, perineal pain was reduced in 13.8% and 79.2% in the control and experimental group, respectively. In addition, 82.9% of women in the experimental reported pain reduction ≥30%, versus only 17.6% in the control group, with significant difference ($p<0.001$). The NNT was 1.46. Perineal temperature decreased from 33.8oC (SD=2.7) to 15.6oC (SD=4.7) in the experimental group.The scores for pain interference in all activities decreased significantly. The mean score of pain interference pre and post intervention were, respectively: sitting (5.9±2.5 v 1.8±2.6), walking (3.9±3.0 v 0.9±2.0), sleeping (2.0±2.7 v 0), caring baby (3.6±3.6 v 0.5±1.48), breastfeeding (2.8±3.7 v 0.6±1.7) and urinating (4.1±4.4 v 1.5±2.9). After the applications, the women reported pain relief (28.6%), anaesthesia (2.8%), burning (11.4%), cold (14.3%), pain (5.7%), numbness (14.3%) and freshness (22.9%). The intervention was rated as being comfortable (77.2%), uncomfortable (17.1%) and indifferent (5.7%). The analgesic properties of ice packs were classified by women as being effective (82.9%), not effective (2.8%) and partially effective (14.3%) .

Conclusion

This study confirm that ice pack is an effective, well accepted method for postpartum perineal pain relief that enable women to better perform their daily activities even applied for 10 minutes.

Key words: Ice pack. Cryotherapy. Pain. Perineum. Postpartum period.

Presenter name:Adriana Amorim Francisco

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Nuchal cords, true cord knots and adverse neonatal outcome

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Introduction

Although scarce and discordant, available evidence suggests that cord pathology is not associated with a significant increase in clinically important adverse events. The aim of this study was to evaluate the incidence of nuchal cords and true cord knots in a population delivering in cephalic presentation, and to study their association with adverse neonatal outcome.

Materials and Method

A retrospective evaluation was performed of 9,615 consecutive cephalic births that occurred in a tertiary care university hospital between July 2011 and January 2015. The number of nuchal cords and cord knots, the type of delivery, 1- and 5-min Apgar scores, umbilical artery blood pH (UApH), and neonatal intensive care unit (NICU) admission were collected from the hospital's ObsCare® electronic patient database.

Results

Nuchal cords occurred in 8.7% of this population (n= 885): with one loop recorded in 7.3 %, two loops in 1.2 %, and three or more in 0.2 %. True knots were recorded in 0.68%, and 97% of these had only one knot.

Among the group with nuchal cords or knots, mean UApH was 7.20 and there were no cases of metabolic acidosis. However, only 26% of all cases had valid UApH data. Eight cases in the cord pathology group had a 5-min Apgar score less than 7, and there were three cases of stillbirth. In this group, instrumental vaginal delivery rate was 22.5% and cesarean section (CS) rate 15.3%, with non-reassuring fetal state as the main indication for the latter (23% of cases).

Fetuses with nuchal cords or true knots had a significantly higher risk of CS for non-reassuring fetal state than the remaining population ($p = 0.011$), and this remained true when restricting the analysis to gestational ages of 35 weeks or above. A higher incidence of NICU admission or fetal death was also found in the study group ($p < 0.01$), but this association disappeared after adjustment for gestational age. No significant associations were found with low 5-min Apgar scores.

Conclusion

Nuchal cords and true knots may increase the incidence of CS for non-reassuring fetal state, but no association was found with stillbirth, metabolic acidosis, low Apgar scores or NICU admission in term fetuses.

Key words: Nuchal cords, true knots, neonatal outcome

Presenter name:Mariana Rei

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Electronic fetal monitoring: inter-observer agreement using four different classification systems

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Introduction

The disappointing performance of cardiotocography (CTG) has been attributed, among others, to different classifications used and low inter and intra-observer reproducibility.

Aim of the present study was to compare inter-observer agreement when using different classification systems.

Materials and Method

We conducted a retrospective study at the Obstetrics Department of the University of Turin between January 2009 and December 2013. The inclusion criteria were: (1) term pregnancy; (2) singleton gestation; (3) medium and low risk pregnancies; (4) active labour; (5) continuous electronic FHR monitoring; (6) lactate value at birth; (7) good quality of the recording.

Forty-three tracings were chosen. From each, a 25' strip was selected, including the last 25 minutes of the first stage of labour or prior to caesarean section.

All tracings were independently evaluated by two senior and two junior obstetricians, who have been working in the Hospital for more and less than 5 years respectively. All observers were blinded to the clinical data of the patient, the outcome of delivery, the lactate value at birth, and the tracing assessment of the colleague on duty who provided care to the woman during labour.

All the tracings were classified using 4 different classifications: the International Federation of Obstetrics and Gynecology (FIGO) classification, the National Institute of Child Health and Human Development (NICHD) classification, the Parer-Ikeda classification and a classification used for many years in our Obstetrics Department (S.Anna Scoring System).

The k statistic was used to assess the reproducibility among observers and fetal monitoring classifications. A k value < 0.40 indicates poor agreement, between 0.40 and 0.75 fair to good agreement and > 0.75 excellent agreement.

Results

The agreement between juniors was poor for all classifications, with the worst result in the Parer's classification (k 0,06). The agreement between seniors was fair for S.Anna (k 0.56), FIGO (k 0.64) and Parer classifications (k 0.75) and excellent for NICHD (k 0.86). The agreement between juniors and seniors was poor for all classifications, except in the case of NICHD (k 0.59).

Conclusion

Our data show that NICHD classification is the best as far as agreement between senior observers is concerned. However, inter-observer agreement between junior obstetricians was low for any classification, indicating a need for education and training in our setting.

Key words: fetal monitoring, inter-observer agreement

Presenter name:Annalisa Piazzese

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ACHIEVING A LOW RISK OF OBSTETRICAL ANAL SPHINCTER INJURIES

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Introduction

One of the main concerns when giving birth is the risk of obstetric anal sphincter injuries (OASIS) which may convey lifelong faecal incontinence. In our department the risk among nulliparous (P0) women giving birth vaginally has been around 8 % for several years. Previous attempts to address this have failed. Interventional programs in Norway have shown that it is feasible to reduce the incidence of OASIS in a cohort of vaginally delivering P0 from 6 to 3 % (1).

Materials and Method

We used the same hands-on technique for the delivery of the baby's head as has been used in the programs described from Norway. Our intervention thus comprises four elements: 1) an agreement with the delivering woman about the intervention, 2) securing that the perineum is visible when the head is being born, 3) one hand on the baby's head in order to slow the speed of progress and 4) the other hand with two fingers on the perineum and the three lateral fingers bent in order to support the perineum and extend the head when passing through the introitus.

All midwifes in the department (around 100) and all doctors (around 20) were certified with this technique which also was to be used when delivering by vacuum extraction (VE). Data was collected prospectively by midwifes on a project sheet and entered into a database by the first author. The project was approved by the local data protection agency.

Results

We used data from January to May 2013 as a baseline, and the project started by June 1st 2013. The presented data include all vaginally delivering P0 through December 2014. During our baseline period 285 P0 delivered vaginally in our two departments in Herning and Holstebro, respectively. Out of this group, 19 suffered from a third or fourth degree tear of the anal sphincter, constituting 6.7% of the whole cohort. During our project period 1,377 P0 delivered vaginally, 48 of which had OASIS comprising 3.5 % in all. The difference is statistically significant with a p-value of 0.02, the relative risk being 0.52 with a confidence interval of 0.31 – 0.88. When comparing with our baseline period, the frequency of episiotomi has remained unchanged: 8.7 % vs. 8.5 % in this group of women.

The risk of OASIS when delivered by VE in 2013 was 12.2 %, while in 2014 the risk fell to 7.2 %. The difference was not statistically different.

Conclusion

Our data show that by implementing a bundle of care comprising the described concept of hands-on for delivering the head of the child, it is possible to cut the risk of OASIS to less than 4 % and maybe even lower for vaginally delivering first time mothers. In a recent commentary, it is argued that we should not overreact to a high and rising frequency of sphincter ruptures (2). If overreacting means not taking action, it is not ethically acceptable. We should analyze our data, and if the rate is more than 4-5 % ruptures in the group of vaginally delivering P0, action needs to be taken, preferably along the described lines.

(1) Katariina Laine et al. Incidence of obstetric anal sphincter injuries after training to protect the perineum: cohort study. BMJ Open 2012;2:e001649. doi:10.1136/bmjopen-2012-001649.
(2) Hannah G. Dahlen et al. Severe perineal trauma is rising, but let us not overreact. Midwifery 31(2015)1–8.

Key words: OASIS; perineal sphincter injury; intervention
Presenter name:Ole Bredahl Rasmussen

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MATERNAL POSITIONS DURING SECOND STAGE OF LABOUR TO IMPROVE PERINEAL OUTCOMES

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Introduction

Perineal injuries during childbirth are related to the practice of an episiotomy or the appearance of tears, with figures ranging from 30 to 84% of women. This fact can cause health problems in the short (blood loss, need for sutures, pain...) and long term (persistent pain, dyspareunia, etc.). There is a trend to adopt vertical positions during delivery, claiming that these postures facilitate the descent of the fetus, improve uterine contractions and maternal bearing down, and increase pelvic diameters. They may reduce the duration of the second stage and the need for assisted delivery. Besides, they reduce pain and allow to take an active role during labor, with a greater sense of control.

However, the relationship between the position adopted during the second stage of labor and the occurrence of perineal trauma is still uncertain; studies are inconclusive and insufficient to recommend a position more than other.

Materials and Method

A meta-analysis was conducted to dilucidate this connection. An exhaustive search was held in PUBMED, SCOPUS, Web Of Science and The Cochrane Library databases. The concordance with the objectives of the study and the methodological quality were the main reasons to decide, whether or not, a study could be included or taken account. Those who did not perform analysis by "intention to treat" were discarded. The assessment of risk of bias of the studies was performed using the Jada d scale. Finally, from the 397 studies found, 17 were included, with a total number of 5396 women.

Results

Vertical positions significantly reduce the number of episiotomies, both in nulliparous, multiparous and regardless parity, as well as evaluating separately the birthing chair or the squatting position. This reduction comes at the expense of increasing labial tears -not in multiparous, nor birthing chair- and tears requiring suturing. Intact perineum rate is higher, and there were fewer episiotomies in the group of women kneeling versus the seated position.

Comparing the lateral decubitus with the semi-sitting position, fewer episiotomies were observed, but more first grade tears, labial tears and tears requiring suturing.

Lateral decubitus, compared with any other position, had fewer episiotomies, at the expense of more labial tears.

Conclusion

The results lead us to recommend alternative positions (vertical, lateral decubitus) to reduce the rate of episiotomies, stressing the importance of taking action to prevent tears during childbirth. Randomized multicenter studies are recommended, and from large population, to try to confirm the results of this meta-analysis. Furthermore, studies about other positions (lateral supine and "all fours", with promising results in

observational studies) are recommended.

Key words: labour, episiotomy, perineum, laceration, position

Presenter name:C. Béjar Poveda

153

THE EFFECT OF FEAR EXPERIENCED DURING VAGINAL BIRTH ON LACTATION, THE BABY'S SUCKING BEHAVIOR AND FIRST BREASTFEEDING

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Introduction

Fear during birth can activate stress hormones and related to this birth process can be prolonged. One of hormones that can be affected by stress is oxytocin hormone. Oxytocin is hormone that is responsible for uterine contractions and in the same time for milk excretion from the breast. Because of that the aim of this study was to determine the effect of fear experienced during vaginal birth on lactation, infant's sucking behavior and the first breastfeeding results.

Materials and Method

The data were collected from 102 mothers in research hospital dependent on the Ministry of Health. Data were collected during delivery process and the first breastfeeding by observation, inspection and evaluation. Four forms were used in total. The first is that Identifiable Information form issued by researchers in order to obtain information about the mother of the handle features. Second form related to evaluation of the process of birth. Third K. the ten item scale developted by Wij Up, S. and B. Alehag Wij Up (Delivery Fear Scale 2002) with aim to measure the fear experienced during labor. In order to evaluate the results of the lactation, the first breastfeeding and the baby's suction behavior the Lactation, Babies Sucking and First Breastfeeding Assessment Form was prepared by the researcher according to the literature. The fear was evaluated in early labour phase and active labour phase and this result were compared with lactation and breastfeeding results. The data were evaluated by one-way ANOVA and Pearson correlation.

Results

The mean point of fear in early f labour phase was 5,69±1,78 and fear experienced during active phase was higher 7,69±1,08. The was not determined any effect of fear in early labour or in active phase on lactation immediatly after birth. All of women had lactation immediatly after birth. But the babies of mothers with high fear in active phase of birth catch the breast harder (p = 0.000), had lower skin to skin contact (p = 0.000), babies were more restless after sucking (p=0.00), mothers were more restless after breastfeeding (p=0.00). In a Also there was determined positive relationship between high birth fear in active phase and

experiencing breastfeeding problems during first feeding (r = 0.527 ** p = 0.000). Also it was found positive relationship between high birth fear in active phase and increased tense in mothers during first breastfeeding (r = 0.509 ** p = 0.000)

Conclusion

The fear experienced by mother in the active phase of vaginal birth has a negative impact on both the baby's sucking and first behavior breastfeeding. Therefore, by preparing mothers for birth, ensuring safe birth environment in delivery room will positively affect mothers fear and improve breastfeeding. This is very important for healthy mothers, babies and basis

Key words: vaginal birth fear, breastfeeding, lactation, health professionals

Presenter name:Asuman Şen

029

Risk factors for excessive blood loss in the COSMOS trial

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2. Royal Women's Hospital, Melbourne, Australia

Introduction

Postpartum haemorrhage is becoming more common in Australia and in other developed countries. The reasons are not fully understood. We collected data on blood loss in a recent randomised controlled trial of caseload midwifery that included 2,314 women. This enables secondary analysis of risk factors for postpartum blood loss of 1,000 mL or more for women who experienced labour.

Materials and Method

Mean postpartum blood loss did not differ between randomised arms (400 mL vs 402 mL), so the data were analysed as a cohort.

Estimated blood loss and other labour and birth data items were collected from the medical record for the 2,202 participants who gave birth at the study hospital. Oxytocin infusion in labour was recorded, regardless of whether it was used for induction or for augmentation. Onset of labour was collected separately.

Analyses included comparison of proportions and Chi square tests, t-tests and multiple logistic regression to identify risk factors.

Results

22.5% of all women lost 500 mL or more in the 24 hours following birth; 5.4% lost 1,000 mL or more and 2.1% lost 1,500 mL or more. 1.0% required a blood transfusion.

5.2% of women who experienced labour had a blood loss of 1000 mL or more. Unadjusted analysis shows that rates were higher for those who had an oxytocin infusion in labour (6.4%, $p=0.027$), a 3rd or 4th degree perineal laceration (19.0%, $p<0.001$), or an episiotomy (7.0%, $p=0.036$). Women who experienced a blood loss of 1,000 mL or more were older, had a higher BMI, gave birth to an infant with a higher birthweight, and, for multiparous women only, had a longer second stage (all $p<0.05$). A blood loss of 1,000 mL or more was not associated with gestation, primiparity, induction of labour overall or method of birth.

Conclusion

Many of the variables associated with a blood loss of 1,000 mL or more are not immediately amenable to change (e.g. maternal age, BMI). The association with the use of oxytocin infusions in labour and with perineal damage will be further explored adjusting for important confounders e.g. birthweight, duration of second stage.

Key words: Postpartum haemorrhage; risk factors
Presenter name:Mary-Ann Davey

095

Assessment of the actual care on postpartum hemorrhage using video images of the third stage

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Introduction

Incidence of postpartum hemorrhage (PPH) still rises, despite of the development of evidence based guidelines and obstetric emergency skill courses, suggesting an incomplete implementation. Insight into actual care is essential to improve implementation. We assessed the actual PPH care by measuring adherence to valid guideline-based quality indicators.

Materials and Method

In an observational multi center study, measurement of actual PPH-care, regarding prevention and management of PPH was performed in 16 Dutch hospitals. The measurement was performed with the use of previously developed guideline-based quality indicators (QI). Data was extracted from 320 medical records (MR) of high risk patients (HRP) for PPH, and complemented the data with prospective video observations (VO) of the third stage in the delivery room. Outcome measures were adherence to the QI regarding process, structure and outcome of PPH care.

Results

The actual care was assessed in 16 hospitals; 4 of them refused video recordings.
The overall adherence to the QI was below 50%.
Regarding prevention of PPH, identification of HRP, policy determination and documentation scored 31% adherence in the MR. Active management of the third stage scored 18% using MR and 35% using MR + VO.
For women with more than 500 ml blood loss, low scores were seen for both, monitoring vital parameters (6% (MR), 14% (MR+VO)) and taking blood samples (23% (MR), 25% (MR+VO)). In managing uterus atony, uterus massage showed 15% (MR) and 33% (MR+VO) adherence, bladder catheterization showed 53% (MR) and 58% (MR+VO) adherence and administering uterotonics 43% (MR) and 53% (MR+VO) adherence.
For women with more than 1000 ml blood loss, assessment showed very low adherence for administration of 10-15 L/min oxygen (9% (MR and MR+VO)) and monitoring urine-production by urimeter (2% (MR), 28%(MR+VO)). Providing a second IV access was found in 48 % (MR) and 55% (MR+ VO) of the cases, while the gynecologist was summoned in 43% (only MR) of the cases.

Conclusion

This study showed poor adherence to the quality indicators, clearly indicating an implementation problem of the PPH guideline and skill courses in The Netherlands. The additional video observations proved valuable as it gives a more precise and accurate illustration of the factors that affect the quality of PPH care.

Key words: Postpartum Haemorrage, Quality of care, guidelines
Presenter name:Mallory Woiski

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POSTERS

002

THE OPTIBIRTH STUDY

P. Healy 1; S. Grylka 2; V. Bronzo 3;
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Introduction

There is a widespread concern over rising caesarean section rates throughout Europe. Further, there are regional and international variations in rates of planned vaginal birth after caesarean section (VBAC) and successful VBACs. Changes of current practices are necessary but challenging. The OptiBIRTH study aims to improve maternal health service delivery, and optimise childbirth, by increasing VBAC through enhanced women-centred maternity care across Europe. The challenges inherent in the design and execution of research studies such as OptiBIRTH are further compounded when such studies take place across several sites and involve a number of different countries with multiple distinct work packages within the study design. The aims of this presentation are: a) to present the OptiBIRTH-study b) to address the challenges of a complex trial.

Materials and Method

The OptiBIRTH study is a cluster randomised controlled trial to evaluate the effectiveness of a complex intervention, designed to improve rates of VBAC in three European countries (Germany, Italy and Ireland). Fifteen maternity units, 5 in each country, were allocated randomly to 9 experimental and 6 control sites. Participants are women with one previous c-section, who are over 18 years old, speak English, German or Italian, had a transverse incision and are pregnant with a singleton. Women are recruited as early as possible in the pregnancy and receive the intervention throughout their pregnancy. Clinicians in each site receive the clinician's intervention from the beginning of the trial. Each woman's journey through OptiBIRTH will begin at her first contact with the care provider and continue until her baby is 12 weeks old at which stage post natal data will be collected. The trial will run over approximately 18 months.

The primary outcome of the trial will be VBAC rates. Secondary outcomes include maternal and neonatal morbidities, information around satisfaction and involvement in decision-making and the economic costs of different modes of birth.

Results

The intervention has been designed, the sites randomly allocated and recruitment of participants is underway. As the trial is in its early stages, clinical results are not yet available. However, we can present some findings about the challenges of complex study processes for participants, sites and researchers. These include slow recruitment, variable engagement with the intervention by women and clinicians, the collection of complex data and differences in care practices across countries.

Conclusion

The OptiBIRTH trial discussed in this presentation is testing an intervention that promotes a common approach shared by all doctors, midwives and women that VBAC is the birth of choice for women with one previous caesarean section unless contra-indicated for a medical or obstetric reason. OptiBIRTH is a complex study.

The design and execution of research studies becomes more challenging when such studies take place across several sites and involve a number of different countries with multiple distinct work packages within the study design. As well as considering and recognising such challenges before and during a complex study, researchers must also manage and mitigate those challenges. This presentation offers some practical examples of the challenges encountered during the OptiBIRTH trial and advice on how those challenges were met.

Key words: OptiBIRTH, VBAC, caesarean-section, cluster RCT,research design.
Presenter name: Patricia Healy

005

Pain appreciation during labour with remifentanil patient controlled analgesia versus epidural analgesia; a randomised equivalence trial

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Introduction

Epidural analgesia (EA) is considered to be the most effective method for pain relief during labour. Remifentanil patient controlled analgesia (RPCA) is, when effective, a less invasive alternative for EA with less side effects. Recent studies suggest that pain appreciation with RPCA is equivalent to EA, but interpretation of these studies is hampered because pain appreciation was inconsistently measured and reported in some trials. The aim of this study was to compare pain appreciation during labour between RPCA and EA in pregnant women at low risk of complications.

Materials and Method

Women with a low risk pregnancy were, before active labour, randomly allocated to a strategy for pain relief with RPCA or EA. Pain relief was administered during labour at maternal request. Primary outcome was pain appreciation of labour pain measured each hour using a Visual Analogue Scale (VAS). We measured the Area Under the Curve from the resulting pain curve. Secondary outcomes were overall pain appreciation of labour pain judged at 2 hours and 6 weeks after delivery, pain scores during labour, mode of delivery and maternal and neonatal side effects.

Results

Between September 2012 and June 2013, we randomised 418 women. Pain relief was requested by 105/203 (52%) of the women in the RPCA group and by 101/206 (49%) of the women in the EA group (RR 1.1; 95% CI 0.87 to 1.3) and received by 94/203 (46%) and 76/206 (37%), respectively (RR 1.3, 95% CI 1.0 to 1.6). Pain appreciation during labour did not differ between the RPCA group and the EA group (difference -1.25, 95% CI -7.6 to 5.1). Among women who actually received pain relief pain appreciation was significantly worse in the RPCA group compared to the EA group (difference -11.4, 95% CI -21.6 to -1.1). The overall pain appreciation and pain score assessed at 2 hours and 6 weeks after the birth did not differ between the groups.

Conclusion

In women at low risk for complications pain relief with RPCA gives comparable pain appreciation as EA when assessed during total time of labour. However, once applied EA improves pain appreciation.

Key words: Pain appreciation; Labour; Remifentanil PCA: Epidural Analgesia

Presenter name: Sabine Logtenberg

007

Women's preference regarding induction of labor: oral misoprostol or Foley catheter.

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Introduction

There are limited data on women's preferences for different methods of cervical ripening for induction of labor. We assessed the experiences among women in whom labor was induced either with oral misoprostol or a Foley catheter.

Materials and Method

Between July 2012 and October 2013 we conducted a multicenter open-label randomized controlled clinical trial comparing induction of labor with 50 mcg oral misoprostol to 30 mL Foley catheter (PROBAAT II trial). In 19 of the 29 participating hospitals women were asked, within 24 hours after delivery, to complete a questionnaire. There are no validated questionnaires for the experiences of induction of labor, therefore a questionnaire based on a validated questionnaire about expectancy and experience of labor by Wijma et al.1 was constructed. Pain perception by women was measured on a visual analogue scale (VAS). We also asked women whether they would be induced with this method again or would prefer the alternative method.

Results

The questionnaire was completed by 509 (42%) of 1200 women approached. Data collection is nearly complete (98%) and data of 500 questionnaires (271 oral misoprostol, 229 Foley catheter) are shown. Experience of the duration of labor, pain during labor, general satisfaction with labor, and feelings of control and fear relative to expectation were comparable in both groups (see table). The overall VAS scores for pain during labor were comparable (mean of 7.9 in the oral misoprostol and 8.2 in the Foley catheter group, difference in means 0.24(95%CI, -3.36-3.83), P value 0.9). In the Foley catheter group, more women would prefer the other induction method in future pregnancy as compared to the oral misoprostol group (12% versus 6%; [OR] 0.4, 95% CI 0.2-0.8).

Conclusion

The experiences of women with an unfavorable cervix at term with induction of labor with oral misoprostol are similar to induction of labor with Foley catheter. However, more women in the Foley catheter group would prefer oral misoprostol for future inductions.

Key words: Women's preference, oral misoprostol, Foley catheter, cervical ripening, questionnaire
Presenter name: Mieke ten Eikelder

008

OBSTETRIC AND NEONATAL OUTCOMES OF ADOLESCENT PREGNANCIES – RETROSPECTIVE STUDY

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Introduction

Objective: The aim of this study is to assess the obstetric outcome of teenage pregnancies compared to adult women .

Materials and Method

A retrospective, comparative study of adolescents (age between 10-19 years) delivered after 24 weeks compared to adult women aged 20-35 years, conducted from January 1, 2004 to December 31, 2010 in a maternity level 3. The criteria considered were the socio-demographic and obstetric characteristics, terms of delivery, neonatal outcome and conduct of post-partum.

Results

Adolescent deliveries represented 4.59% (1122) of all pregnancies. Adolescent had less prenatal consultations and ultrasounds than controls ($P < 0.001$). Adolescent pregnancies had significantly higher rates of preterm threat and birth compared to the controls (29.3%, $p = 0.041$ OR 1.28). Both groups were similar in mean blood loss, rates of cesarean or instrumental deliveries. The rates of vaginal tears and episiotomies were significantly higher than in the adult group ($p < 0.001$). The risks for low birth weight neonates and perinatal mortality are higher than the control group.

Conclusion

Adolescent pregnancies are associated with higher risks of adverse pregnancy outcomes. The teenage pregnancy prevention strategies and the improvement of healthcare interventions are critical to reduce maternal mobility and prenatal mortality.

Key words: Adolescent pregnancies; preterm birth; teenage deliveries; delivery

Presenter name: Maria João Palma

009

The Epidemiology of Cerebral Palsy in Irish Children: a Cohort Study

P. Healy

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Introduction

Cerebral palsy is one of the most severe disabilities in childhood. Despite advances in obstetric and neonatal care, the incidence of cerebral palsy has remained virtually unchanged at 2- 2.5 per 1,000 live births worldwide for the past two decades. This epidemiological study investigated a cohort of children with cerebral palsy to establish their demographics, clinical characteristics and risk profiles.

Materials and Method

A retrospective study was conducted in a cohort of children with cerebral palsy born between 1990 and 2000 in a geographical area in the Republic of Ireland. Cases were identified from a cerebral palsy register. Data were extracted from maternal and neonatal records using a standardised data extraction form. Data analysis was conducted using SPSS (Statistical Package for the Social Sciences) version 18 and the Cochrane Review Manager Software (RevMan).

Results

One hundred children with cerebral palsy participated in the study. Singleton births accounted for 89% of the cohort and 11% were from multiple births. The gestational ages ranged from 24 to 42 weeks with 61% of the children being born at term and 39% born prematurely. Birth weights ranged from 780 grams to 4990 grams. The birth prevalence of cerebral palsy for the years studied was 1.9 per 1,000 live births (95% confidence intervals [CI] 1.6-2.2). The Cerebral palsy subtype was classified by the type of movement disorder; spastic, dyskinetic and ataxic and by the number of limbs involved; hemiplegia, diplegia and quadriplegia. Many of the children have other impairments in addition to their motor difficulties that compound their condition. The presence of these co-morbidities has implications for the type and level of health and educational services the children will require. The children in the cohort were also classified by the aetiology of their cerebral palsy. Aetiology, by likely time of origin, was classified into antenatal, perinatal, preterm, neonatal and unclassifiable.

Conclusion

The prevalence and distribution of antenatal, intrapartum and neonatal factors associated with cerebral palsy are similar in Irish children to that found in other populations of children with cerebral palsy. There is a need for a single, centralised cerebral palsy database in Ireland using standardised definitions, classifications and descriptions.

Key words: Cerebral palsy, epidemiology, cohort study

Presenter name: Patricia Healy

010

Early secondary perineal repair: a pilot study at Aarhus University Hospital

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Introduction

A new approach to postpartum care for women was adapted in our hospital in Denmark in 2013. All women are now offered routine check-up of perineal wounds. Midwives perform the examination 48-72 hours after vaginal birth in a Postnatal Clinic. If the wounds show signs insufficient primary repair or suture break down, an early secondary repair is offered.

Materials and Method

The aim of this study is to evaluate a policy of early secondary repair of insufficiently sutured perineal lacerations of 1st or 2nd degree and episiotomies.

All women who have sustained 1st or 2nd degree perineal lacerations or episiotomies are in our study group. More than 6000 women of mixed parity have visited the Postnatal Clinic from 01.02.2013-31.01.2015. We thus have a 2-year consecutive data collection.

Midwives at the Postnatal Clinic perform an objective evaluation of haling in more than 90% of the women. Primary outcomes are: 1) Insufficient primary repair, 2) Stitches breaking down, 3) Infection, 4) Postpartum perineal pain.

A group of three specialised midwives were responsible for the assessment of insufficiently healed wounds, of performing the secondary repairs and assessing the results at follow-up 7-10 days postoperatively.

Results

We have conducted more than 70 early secondary perineal repairs to the labia, 1st and 2nd degree perineal lacerations.

Urogynaecologists act as consultants to the clinic and challenging cases are discussed at regular inter-professional meetings.

Cases of good and poor wound healing is documented by photos which enables us to give feedback to the clinicians involved in the primary repair following vaginal birth.

Conclusion

Women and their partners welcome the opportunity of a professional evaluation of perineal wound healing. The initiative of evaluating perineal wound healing has led to the development of a guideline on early secondary repair performed by midwives.

Data analysis is in progress and will be presented at the conferences.

Key words: Perineal wound healing, early secondary repair, pilot study
Presenter name: Sara Kindberg

011

Home Birth in Portugal

Mary Zwart, midwife, president of the birth center Alma Mater,V.N. de Poiares Portugal
Mary Zwart, till now a liberal midwife working in Portugal and not affiliated to any institute.
The results are the outcome of my practice till 2013

Introduction

The infrastructure of perinatal care in Portugal does not include home birth as a choice for women.
Almost all midwives work or in hospitals or health centers. Midwives providing the whole of perinatal care hardly excist.
I will present the outcome of 106 homebirths and the % of transfer and S.C. rate.
The aproach of the first hour after birth will be highlighted

Materials and Method

A retroperspective cohort study of 106 births 2008-2013.
The presentation will include a clip on late cord clamping and and a power point presentation with the results of these births.

Results

The results will support the choice for women in Portugal. The % of transferral rate is due to the fact that most briths were without the range of one hour of the hospital.

Conclusion

The infrastructure of perinatal care should allow women in the system to have this choice.
Midwives needs more education to be able to support this choice.

Key words: Home birth and happy hour in Portugal.
Presenter name: Mary Zwart

012

DEVELOPMENT AND TESTING OF THE WOMEN'S PERCEPTION FOR SUPPORTIVE CARE GIVEN DURING LABOR SCALE

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Introduction

During labour, nursing care is separated into two as clinical skills and supportive care. Supportive care affects women's labour experiences. There is a need for valid and reliable measurement tools for evaluating supportive care. The aim of this study was develop and validate women's perception for supportive care given during labour.

Materials and Method

A methodological design. A total of 360 women who gave birth at two state hospitals between July-November 2012 participated in the study. Written permission was obtained from the Ethics Committee, hospitals and participants. Data was collected with the Women's Identity Information Collection Form and Draft Scale Form.

Results

Content validity of the scale (0.94) was obtained with expert views. Three factors, comfortable behaviours, education and disturbing behaviours, were prepared for exploratory factor analysis and factor loading varied between 0.38 and 0.76. Confirmatory factor analysis the conformance indices of the scale were: x2: 1308.49, degree of freedom: 492, Root Mean Square Error of Approximation: 0.068, Good of Fit Index: 0.82, Comparative Fit Index: 0.97, Non-normed Fit Index: 0.97 and Normed Fit Index: 0.95. The scale's Cronbach coefficient was 0.94, Comfortable Behaviours sub-dimension was 0.92, Education sub-dimension was 0.85 and Disturbing Behaviours sub-dimension was 0.87. The correlation coefficient between the scale's first and second part was 0.80. The scale's item-total point correlations varied between 0.42 and 0.77.

Conclusion

The scale was valid and reliable for measuring women's perception for supportive care given during labour. The aspects that midwives/nurses should develop can be determined by using this scale. Consequently, the quality of care could improve. Thus, women's labour experiences would be more positive and their satisfaction would be higher.

Key words: Labor, Supportive Care, Validity, Reliability, Scale

Presenter name: Elif Uludağ

013

THE IMPROVEMENT IN THE MIDWIVES TRAINING FOR THE CORRECT INTERPRETATION OF CONTINUOUS CARDIOTOCOGRAPHY

1 M.J. Gutiérrez Martín; 2 C. Vaquero Gajate; 3 M.J. Pérez Curiel

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Introduction

The midwives training for the correct interpretation of continuous cardiotocography (CGT) in basic for their professional competences development. Our Midwives School sees this as essential and it has been a subject of improvement over the years.

Part of our students´annual evaluation is done by an Objective Structured Clinical Examination (OSCE). This test consists of 9-10 simulations stations and the topic on the interpretation of continuous CTG is valuated through a station designed as a structured written exam. This station obtained the lowest average score. For this reason, the OSCE Committee took a series of actions for improving this station. Although these actions, the average score has increased only from 6.0 to 6.6. That is why; it remains at improvement area of the midwives training.

For this reason, the aim of this study is to determine the most appropriate educational method for improving the ability of midwife students for the interpretation of continuous CTG

Materials and Method

In spite of educational methods and design improvements used in this OSCE station on the interpretation of continuous CTG, the Midwives School considers that with such low scores obtained by students, it must be questioned new strategies which improve the acquisition of this basic competence for their professional practice.

We decided to enhance educational methods developed by our Midwives School with an isolated simulation related to the interpretation of continuous CTG followed by a session of personalized advice in order to encourage feedback with students and thus contribute to support the summative assessment.

This is an experimental study in which the independent variable is the new educational methodology that has been introduced such as OSCE training (isolated simulation followed by personalized advice) and the dependent variable is the level of competence acquisition on the correct interpretation of continuous CTG

Results

We belive that through the inclusion of this training strategy for midwife students, it will improve their abaility to interpret continuous CTG.

It will be taken into account for measuring results:

1. Average score in this station and its comparative in relation to previous years
2. The results on the interpretation of continuous CTG item that is include in Competences Assessment Handbook (clinical practice) and its comparative in relation to previous years
3. Satisfaction degree with respect to this station and to the new educational method used

Conclusion

When this study was completed, then we can assess if the new educational method is valid for improving the future professionals´ ability for the interpretation of continuous CTG

Key words: continuous CTG, midwives training, educational methods, OSCE

Presenter name: M.J. Gutiérrez Martín

015

Satisfaction of care throughout labour related to the number of persons present during the active second stage of labour.

M. Merino; S. Rabanal

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Introduction

The satisfaction sensed by women with care throughout labour is an indicator of quality and is essential its knowledge for providing an appropriate care. The emerging learning needs established by the European Higher Education Area compels to increase training practices and the established agreements with universities ensured the education of Health Sciences in university hospitals. The law indicates that it should be avoided the presence of people who are not part of the woman´s care or are unauthorized by her. Although, this law provides the presence of trainees as long as it be respected the most of privacy.There are studies that assess women´s satisfaction with the whole birthing process. However, there is little evidence that connected woman´s satisfaction with the presence of an appropriate staff during the active second stage of labour.This is a ground-breaking study that permits the improvement of the teaching capacity organization and which is aimed the total quality concept.

Materials and Method

It is a descriptive and across-sectional study. The sample size required is 238 women with vaginal birth for the period between 1 January and 1 May 2015 in the "Rio Hortega" University Hospital in Valladolid (Spain). To measure the maternal satisfaction we will use a validated satisfaction survery with 11 items. The independent variable is the number of persons present during the active second stage of labour and the dependent variable is the satisfaction sensed by women. Indicators which we will use to assess satisfaction are: confidence, safety, privacy, healthcare received, clear information and degree of satisfaction.

Results

The evaluation of the satisfaction degree shall be calculated by using the Satisfaction Index which we will classify by standars of quality. We shall also make a statistical analysis to describe results.

Conclusion

We shall analyze the findings and their possible implications. To measure the mother´s satisfaction with healthcare receives it serves to improve the quality of care throughout labour.

Key words: satisfaction care, birth experience, persons present active secon stage of labour

Presenter name: Magdalena Merino Salán

016

The Effects of Intrapartum Supportive Care on Fear of Delivery and Labour Outcomes: A Single Randomized Controlled Trial

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Introduction
Supportive care during labour is the primary role of intrapartum nurses and midwives and provides comfort to women allowing them to have a positive experience. It is argued that supportive care during labour reduces fear and anxiety and resultant side effects. However, evidence supporting this argument is insufficient. The aim of this study was to assess the effects of intrapartum supportive care on fear of delivery and delivery outcomes.

Materials and Method
This study used a single-blind, randomized controlled trial approach. Randomized block assignment was used to assign 72 participants to either the intervention group (n=36) or the control group (n=36). Because 3 women in the intervention group and 6 in the control group underwent emergency caesarean delivery during labour, they were excluded from the sample. The intervention group was offered continuous supportive care, and the control group was offered routine hospital care.

Results
No significant differences existed between the two groups at baseline ($p > .05$). The women receiving supportive care during labour experienced less fear about delivery during active and transient phases, higher perceived support and control in delivery, lower pain scores in the transient phase of labour, and a shorter delivery period than the control patients ($p < .05$). However, a significant difference was not reported in Oxytocin use in delivery between the two groups ($p > .05$).

Conclusion
Results from this evidence-based study suggest that continuous support during labour has clinically meaningful benefits for women and that all women should have support throughout labour and delivery.

Key words: supportive care, labour, fear of delivery, intrapartum nursing, midwifery
Presenter name: Gözde Gökçe İsbir

017

Unresponsive wife after rupture of membranes

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Introduction

Amniotic fluid embolism, also called anaphylactoid syndrome of pregnancy, is a rare but severe problem in obstetrics. It occurs in 8/100000 births and the maternal mortality is up to 90%.

We report the case of a patient with amniotic fluid embolism who was transferred to our hospital. The initial presentation was an unresponsive patient after spontaneous rupture of the membranes. The massive hypotension and coagulopathy as well as fetal bradycardia of 60 beats per minute led, after stabilisation of the mother, to an emergency cesarean section. The neonate expired hours later, despite neonatological intensive care. During the operation, we had to deal with a massive bleeding due to the coagulopathy. Through interdisciplinary teamwork including Bakri® postpartum balloon insertion through the obstetrics team, uterine artery embolism by the interventional radiologists and transfusion of blood products, the maternal life was saved and the patient was discharged nine days after admission.

Materials and Method

Amniotic fluid embolism (AFE) is a well-known but fortunately rare occurrence for obstetricians. Therefore, most practitioners will never see a patient with this severe diagnosis. In its sudden and life-threatening presentation, it is of utmost important to recognize this problem immediately and correctly deal with it in order to save the patient`s life.

Results

A 29-year old primipara was admitted to the emergency room of the University Hospital of Basel at 38 weeks and 5 days by ambulance, one hour after spontaneous rupture of membranes, followed by syncope at home. She had delivered 5 years before by ventouse and had an unremarkable pregnancy. She was otherwise healthy and had not been taking any medications. She had no known allergies.

On admission, the patient was unresponsive with a blood pressure of 74/45 mmHg, a heart rate of 120 bpm and an oxygen saturation of 88% on room air. The fetus was in a cephalic position, and at first ultrasound examination the heart rate was >100 bpm. At examination, there was no vaginal bleeding and no uterine contractions were palpable.

Blood samples were sent to the laboratory for analysis and patient stabilisation with two large-bore venous catheters and volume therapy were started. Fifteen minutes after admission, fetal heart rate dropped to 60 bpm and an emergency cesarean section was performed.

The first blood results showed a coagulation profile with a hemoglobin value of 92 mg/l, thrombocytes of 135x10`9/l, INR >12, aPTT >180 s, fibrinogen <0,3 g/l.

At admission, we considered the differential diagnosis for syncope in pregnancy. As preeclampsia/eclampsia may cause loss of consciousness and is a fairly common problem in pregnancy, we thought of this first and prepared a magnesium sulfate infusion as soon as we were notified of this patient. This diagnosis was discarded after her arrival in the emergency room and hypotension with normal liver enzymes were found. Hypotension as a consequence of massive peripartum hemorrhage was another idea, but neither intraabdominal fluid (f. e. due to uterine rupture) nor severe vaginal bleeding were identified.

Massive placental abruption is also known for being associated with acute severe coagulopathy. However, ultrasound examination did not show any sign of abruption.

In patient's history, we found no suggestions pointing towards pulmonary embolism, anaphylactic shock, myocardial infarction, aspiration or sepsis.

Therefore, our suspected diagnosis for this patient presenting with spontaneous rupture of the membranes with acute hypotension, acute hypoxia and coagulopathy was amniotic fluid embolism, despite about its rare occurrence.

With the suspected diagnosis of AFE we decided to perform the emergency cesarean section. The patient underwent general anaesthesia with thiopental, succinylcholine and fentanyl, and cesarean section was performed 40 minutes after admission to our hospital.

Following the uterine incision, the amniotic fluid was noted to be bloody due to the disseminated intravasal coagulopathy. A non-reactive, floppy female infant was delivered. The weight of the neonate was 3030 g,

with an APGAR score of 0/0/0 and umbilical arterial pH of 6,85. Intensive care for the baby was provided by the on-site neonatology team.

The placenta was manually removed. For enhance uterine contraction, an infusion with sulprostone was started. A Bakri® postpartum balloon was inserted into the uterus to try to lessen the severe bleeding and the abdominal wall was closed in a standard fashion after insertion of an intraabdominal Blake drain.

The anaesthesiological team corrected the coagulopathy and massive blood loss by aggressive blood and blood-component replacement with 13 erythrocyte units, 4x 200 ml fresh frozen plasma, 2000 E factor VIII/vWF (Haemate®), 2500 E Prothromplex®, 2 g calcium gluconate, 2000 E Kybernin®, 4x 2g fibrinogen, 1 unit of thrombocytes and 2 g Cyklokapron®. A central venous catheter was placed in the internal jugular vein as well as a catheter in the femoral artery.

Due to uncontrollable bleeding a massive blood loss of approximately 5000 ml, a uterine artery embolization was performed. After successful embolization and cessation of bleeding, the patient was transferred to the intensive care unit. We removed the Bakri® balloon 24 hours later and transferred the patient to the postpartum ward in stable condition. The Blake drain was removed on postpartum day 2. The nadir of the hemoglobin levels was 46 g/l.

Despite maximal neonatal intensive care unit support, the baby's life could not be saved. All resuscitative and life-preserving efforts were stopped 2.5 hours after delivery and the baby died in the father's arms.

On the first day, the patient showed a transient global amnesia which was reversible. In the following days, she did not show any neurological deficits. An echocardiography was performed and showed a dilated right ventricle, highly suggestive of an embolic event. A computer tomography took place did not demonstrate a pulmonary embolism. Nine days after admission, the patient could be discharged from the hospital.

Four weeks after discharge, another transthoracal echocardiography was performed and showed normal cardiac function with a normally sized right ventricle.

Histological examination did not show any suspicion for placental abruption.

Conclusion

AFE is a rare, unpredictable and life-threatening complication during labour or within 30 minutes post partum, during caesarean section or with abortion.

Basically, there is an abnormal inflammatory response with activation of pro-inflammatory mediator systems, known as a systemic inflammatory response syndrome (SIRS). This is the reason why some authors call the syndrome "anaphylactic syndrome of pregnancy". Diagnosis is based on clinical observations. Symptoms associated with amniotic fluid embolism are hypotension, dyspnoea, cyanosis, fetal heart rate abnormalities, loss of consciousness, cardiac arrest, uterine bleeding and uterine atony. There are also many cases in which the components of the triad hypoxia, hypotension and coagulopathy are absent.

No specific therapy is available. Prognosis and outcome are dependent on rapid intervention. Hypoxia and dyspnoea are treated with oxygen administration, if necessary, with intubation. Coagulopathy and haemorrhage need aggressive blood and component replacement. If the fetus is still in utero, prompt delivery is indicated.

Key words: Amniotic fluid embolism, coagulopathy

Presenter name: Johanna Buechel

018

Prospective study of Pre-term Birth

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Introduction

Prematurity accounts for 75% of neonatal deaths and more than half of neurological impairment in children. The improved neonatal care led to increased survival of premature newborns. However a significant impact on mortality and morbidity of these children will only be achieved through the development of a sensitive method to identify women at high risk of premature birth and an effective strategy for the prevention of this complication.

We aimed to identify if the first trimester combined screening, β-HCG, PAPP-A, uterine artery Doppler and maternal characteristics is associated with development of spontaneous preterm birth before 37 weeks gestation.

Materials and Method

A prospective cohort of 427 low risk singleton pregnancies underwent routine first-trimester screening from 2011 through 2013. Maternal characteristics, blood pressure, uterine artery Doppler, levels of pregnancy-associated plasma protein-A (PAPP-A) and free β-human chorionic gonadotropin were evaluated.

Results

Of the 427 enrolled patients, 155 were excluded. Of the 268 pregnant women included in the study, 14 (5.2%) had a spontaneous delivery before 37 weeks (group 1) and 254 (94.8%) pregnant after 37 weeks (group 2).

Group 1 had a mean value of β-HCG (1.02 vs 1.17, p-value 0.39) and PAPP-A (0.86 vs 1.14, p-value 0.05) lower than the control group. On the other hand the minimum pulsatility index (1.68 vs 1.57, p-value 0.44), maximum (2.05 vs 1.98, p-value 0.77) and medium (1.87 vs 1,77, p-value 0.58) of the uterine arteries were higher than in group 2. In relation to maternal characteristics, BMI (23.50 vs 24.46, p-value 0.27) and weight gain during pregnancy (13.12 vs 14.86, p-value 0.43) was lower in this group.

The mean arterial pressure was lower in group 1 (81 vs 86, p-value 0.03).

Conclusion

Women with spontaneous delivery before 37 weeks had lower mean value of biochemical markers, higher values of the uterine pulsatility index and BMI; weight gain and mean arterial pressure was lower than the control group, although there was no statistical significance.

Key words: Prematurity, first-trimester screening, prevention

Presenter name: Ana Carocha

019

What is the limit age of women for getting pregnant? Maternal and neonatal outcomes in women of advanced maternal age

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Introduction

The purpose of this retrospective study is to evaluate the maternal and neonatal outcomes in women of advanced maternal age (AMA; >35 years old)

Materials and Method

A retrospective, comparative case-control analysis from January 1, 2004 to December 2010 was undertaken in a level 3 Maternity. We evaluated pregnant women with advanced age (35 years old and above) who had delivered after 24 weeks compared to adult women, aged 20-34 years. The criteria considered were the obstetric history, delivery mode, neonatal outcome and post partum conduct.

Results

Women in advanced age deliveries represented 8.59% (2100) of all pregnancies. This group had a higher occurrence of chronic hypertension (5.7% versus 1.2%) and pregestational diabetes (2.5% versus 0.5%). The incidence of gestational diabetes was significantly increased. The caesarean delivery rate was higher in this group, although no statistically significant differences were observed. The most common cause of caesarean section indication was foetal distress. No statistically significant differences were observed in the incidence of early membrane rupture, preterm birth, IUGR and postpartum haemorrhage. First minute Apgar scores and birth weight were investigated to evaluate perinatal outcomes in newborns. In our study, lower Apgar scores were observed in the older pregnant women' newborns.

Conclusion

Advanced maternal age (AMA) of 35 years and above is associated with increased risk of adverse pregnancy outcome. With adequate antenatal care it is possible for women of advanced maternal age to have successful pregnancies with overall favourable outcome comparable to that in young women.

Key words: Advanced maternal age; pregnancy outcome

Presenter name: Maria João Palma

020

Peripartum Cardiomyopathy: A case report.

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Introduction

Peripartum cardiomyopathy (PPCM) is a specific form of dilated cardiomyopathy in which left ventricular systolic dysfunction and symptoms of heart failure occur in the period between the last month of pregnancy and five months after delivery. It is relatively unusual and occurs in the absence of prior known heart disease.

Materials and Method

A In this case report we describe the development of PPCM in the first pregnancy of a 28- years-old woman, previously healthy, who developed de novo symptoms of unexpectedly heart failure, like dyspnea, orthopnea, and global respiratory insufficiency, in the third stage of labor.

Results

patient was admitted in the intensive care unit (ICU), and had inotropic and invasive ventilation until the 2th day in the ICU. The patient went out from hospital in the 15th day after delivery. Her outpatient medication was Enalapril 2,5mg 12/12h.

On the follow-up visit at 3 months after delivery, the patient was clinical and echocardiographic stable.

Conclusion

The peripartum cardiomyopathy is a rare disease of unknown mechanism. The diagnosis should be considered in any case of peripartum heart failure in the absence of underlying heart disease. The close cooperation between obstetricians and cardiologists is essential for a better management and prognosis of women with PPCM

Key words: Peripartum cardiomyopathy; heart disease; pregnancy

Presenter name: Maria João Palma

022

Promoting low-risk birth in Finland

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Introduction

More than 75 per cent of labors at the Tampere University Hospital are uncomplicated vaginal deliveries. According to systematic reviews many unnecessary interventions are done at normal birth in hospitals. Interventions tend to lead to other interventions and the risk of instrumental delivery increases.

Materials and Method

Aims for this multiprofessional project were to establish criteria for low-risk birth, to describe the process of low-risk birth and to evaluate the changes in birth giving practices during the first year of the project .
METHODS: During the project in 2012 -2013 every woman coming to the maternity unit was evaluated according to the risk evaluation form. Statistic evaluations were made on the changes of birth giving practices and the satisfaction of parturients and midwives.

Results

Results: During the pilot of project: Intermittent auscultation increased from 21% to 26%, The use of scalp electrodes was decreased 975 pc:s from year 2012 to 2013. Oxytocin use decreased from 51.8 % to 49.8%. CS rate was 2.1% and vacuum extract rate was 5,2 % .
Number of babies with umbilical artery pH less than 7,05 was 0,7% (year 2014).
Low-risk women´s satisfaction compared to others was slightly better. Midwives´ feedback about the project was good: 52% felt more satisfied with work, 48% felt the same as before and none felt less satisfied.

Conclusion

Conclusions: Patient satisfaction stayed good and midwife satisfaction increased along the implementation of the criteria for low-risk birth. The low-risk birth process appeared safe for the newborn. Oxytocin augmentation was still quite high even if gradually decreasing, and the use of scalp electrodes diminished, which may involve also economic benefit

Key words: low-risk birth

Presenter name: Sanna-Kaisa Kukko

024

Promoting active birth and supporting normality

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Introduction

The midwife's role is around supporting and promoting normal pregnancy and a physiological birth. The evolution of midwifery care and maternity services has positively impacted on the health and well being of women and babies. However this evolution has change the enviroment and model of care in midwifery practice which has also increased the technological interventions in birth and in some cases changes the fundamental role of the midwife. Many student midwives do not observe true physiological birth or their experiences of active and natural birth can be limited, reducing their confidence to support women in normal birth. NICE (2014) Intrapartum care guidence acknowledges the benefits of being upright and mobile in labour to reduce pain and to promote the normal physiology. There also needs to be recognition that women who require obstetric surveillance can still be supported in having an active birth.

Materials and Method

To support student midiwives and midwives we have devloped two online learning modules, one to act as an aide memoire using short video clips, the second is a longer more complex module including physiology and guidance for practice.

The Royal College of Midwives had commissioned some short video clips to demonstrate labour and birthing positions, these clips with other freely available "Youtube" clips have been used to develop two online learning modules to support and promote normaility. The aim of the modules is to refresh midwives knowledge, to increase their confidence in promoting active birth and to support students in their professional development.

On line learning enables the learner to access the work at a time that suits them, whether this is in the work place as a teaching aid for students or to refresh and regain their confidence away from the clinical environment.

Results

This is not a research or clinical case approach - this submission looks at how we can support midwives and students in their understanding of the physiology of normal birth to enable them to provide supportive and competent care for women, improving birth outcomes and reducing unnecessary interventions.

Conclusion

We appreciate that students and midwives have a knowledge of the physiology of the birth process. However, medical models of care, hospital birth and sometimes women's unrealistic expectations of birth have changed how midwives care for women in labour. The online learning modules provide midwives and students with an easy access resource with in-depth anatomy and physiology to support the relevance and application of the theory to clinical practice.

Key words: active birth, normaility, elearning
Presenter name: Gail Johnson & Jacqui Hall

026

PROLONGED FETAL BRADYCARDIA AFTER EPIDURAL ANALGESIA – WHAT TO THINK?

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Introduction

The previous believe that once a cesarean, always a cesarean (Cragin 1916) is nowadays known to be invalid. Vaginal birth after a cesarean section (VBAC) is currently considered a good practice for women who meet certain criteria. The major risk remains the dehiscence of the cesarean scar and eventually the uterine rupture; fortunately a relatively rare complication.

The epidural analgesia is globally accepted as a useful and safe procedure for labor pain relief. Fetal bradycardia is a well known side effect of this technique and can be due to maternal hypotension, among others.

Here, we describe the case of a 40 year old woman who had a uterine rupture when she tried the third VBAC at 39 weeks and 1 day of gestation, which presented as a sustained fetal bradycardia immediately after maternal epidural analgesia.

Materials and Method

Obstetrics and neonatal files of Maternidade Dr. Alfredo da Costa, Lisboa.

Results

Case report: SMMMN, 40 year old pregnant woman, gravida 5 para 3 (cesarean section due to dystocia and two instrumented vaginal deliveries after), 39 weeks and one day, with gestacional diabetes insulin treated. A labor induction with low dose oxytocin (10U/1000cc infusion of 10mL/h in the first 4 hours and then 20mL/h) was decided as the bishop score was 8.

Nine hours after the cervical dilatation was 4cm and epidural analgesia was proposed. Soon after a sustained fetal bradycardia occured. Resuscitating maneuvers were performed with no fetal recovery. She was asymptomatic, with no vaginal bleeding or umbilical cord prolapse. An emergency cesarean delivery was decided and performed within 15 minutes.

Operative findings revealed a moderate hemoperitoneum and a fetus foot out of the uterine cavity. After an urgent complete exteriorization of the fetus from the uterine rupture, a 6 cm regular laceration was found on the left lateral uterine wall. The previous cesarean section hysterorrhaphy was normally healed. The baby boy weighed 2980g and had Apgar scores of 2, 5 and 7 at 1, 5 and 10 min respectively. A hysterectomy with ovarian preservation was performed as the wound was rather extensive and bleeding. After appropriate treatment, the mother was discharged uneventfully within 5 days. The newborn remained in the neonatal intensive care unit and held therapeutic hypothermia with very good neurological outcome, which allowed him to go home at day 11. Both mother and son remained well until today.

Conclusion

This case raises two main issues: the induction of labor in multiparous women with previous cesarean section and the diagnosis of uterine rupture after epidural (with no pain). Also, it alerts us to the importance of maternal and fetal monitorization intrapartum and the possible consequences of our intervention during labor.

Because of the confounder factors present, the correct assessment and diagnosis was further challenging. As this report is about an isolated and extremely rare case, the benefits and safety of VBAC have not however, been questioned.

Key words: uterine rupture, vaginal birth after cesarean section, fetal bradycardia

Presenter name: Nisa Félix

027

Unconscious dynamics in Sub-Saharan African and Italian new mothers emerging from the Lüscher color test.

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Introduction

Few studies have been designed to assess the psychological state of women living in the Western Hemisphere after delivery, and even fewer on that of new mothers living in disadvantaged, low-income areas, such as Sub-Sahara Africa (SSA). In the absence of a readily understandable international language, the Lüscher color test is at times used to uncover unconscious dynamics and personality traits.

Materials and Method

Seventy-two new mothers: 24 women living in SSA who gave birth between December and January 2013 and 48 Italian mothers (ratio 1:2) who gave birth between March and June 2013 at the Abano Terme Polyclinic Hospital (Abano Terme, Italy) were enrolled. The Italian women were comparable with the Ethiopian mothers with regard to the type of delivery (vaginal), gestational age (at term), and early breastfeeding attempts. None had severe physical or psychiatric problems immediately after birth.Once the women received information and gave consent they were referred to one of the authors (C.G.) who held a face-to-face interview and administered the shorter Lüscher 8-Color Test within 6-12 hours from delivery.The Lüscher color test (1947) is a psychological instrument that is based on the theory that colors are selected in an unconscious manner. According to the author's theory, subjective color preferences reflecting personality traits and unconscious dynamics can be objectively measured .

Results

The short form of Lüscher color test revealed discordant color choices in their favorite and their rejected colors in Ethiopian with respect to Italian new mothers. While a majority of Italian puerperae chose violet as their favourite color (58.33%), the first choice of many of the SSA women was yellow (33.33%). A majority of SSA mothers indicated that grey was their least favorite color (58.33%), while most Italian women chose black or brown (33.33%).

Conclusion

This exploratory study reveals, trough the Lüscher color test, significant differences between personality traits in SSA Ethiopian and Italian women early after delivery. Ethiopian new mothers wants to live every experience intensely, conversely Italian new mothers idealized their status and wanted to enjoy this magic and extraordinary time. In this period characterized by great migrations, understanding the complexity of such reciprocal relations at home and in the industrialized countries by extended Lüscher test will provide considerable challenge.

Key words: Personality traits; unconscious dynamics; Sub-Saharan African new mothers; Italian new mothers; Lüscher color test.

Presenter name: Francesca Savio

028

How do women experience induction of labour? A qualitative study.

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Introduction

Approximately 22% of childbearing women in the UK have their labour induced (BirthChoiceUK, 2014). Although much has been written on the medical aspects of induction, little is known about how women actually experience it. Verbal evidence suggests a large discrepancy between women's expectations of induction and the realities they experience, resulting in lasting negative impressions of childbirth and complaints about care provision.

Materials and Method

During the Autumn/Winter of 2012-13, twenty-one healthy, first-time mothers who gave birth following induced labour took part in semi-structured interviews about their experiences of induction. Full NHS ethical approval was granted. The purpose of the study was to explore women's experience of induction within the context of the discourse on informed choice. An opportunistic sample of English-speaking, primiparous women over 18 years of age was recruited via an NHS maternity unit in the south of England. Semi-structured, audio-recorded interviews were conducted by the researcher at 3-6 weeks postnatally.

Results

Key issues from the findings include:

Women are often poorly informed about induction. Family and friends provide more meaningful information than health professionals.

Induction is rarely presented as an option, even for uncomplicated post-dates pregnancy. Despite the current discourse on informed choice, women are routinely steered towards compliance with accepted norms rather than being supported to make informed decisions about their care.

Women have unbalanced perceptions of risk in relation to induction for post-dates pregnancy.

Women often arrive in hospital with unrealistic expectations of what the induction process entails. Discrepancies between expectations and reality often lead to negative birth experiences.

The experience of beginning induction on the antenatal ward is often distressing and confusing for women: their definitions of 'being in labour' often differ from those of midwives and doctors.

Conclusion

This study highlights the importance for midwives and doctors of seeing induction through women's eyes in order to understand their experience and offer the best possible care.

Key words: Induction, Labour, Womens experience
Presenter name: Annabel Jay

030

Dutch midwives' views on their role as promotors of physiological childbirth

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Introduction

Background: Dutch midwifery has been traditionally viewed as a model in which a physiological approach to birth is fundamental to midwifery practice. Dutch midwifery is in a period of change; home birth is in decline and births in the hospital setting are increasing. It is unclear how Dutch midwives who work in either setting view their role as promotors of physiological childbirth and which factors support or hinder them in this. An example of this is the use of non-supine birthing positions during second stage labour. It appears that Dutch midwives, in both home and clinical settings do not routinely make use of non-supine birthing positions as a means of promoting physiology.

Materials and Method

Aim: To explore Dutch midwives' attitudes towards physiological childbirth and their perceived role in promoting and supporting this. Furthermore to explore practices with regard to the utilization of non-supine birthing positions and factors which encourage or inhibit this.

Method: A qualitative exploratory study using focus groups. With up to 32 midwives, from both hospital and community settings, attitudes to promoting physiological childbirth were explored. The ASE (Attitudes, Social norms, (Self) Efficacy model of behavioural change (de Vries et al, 1988)) was utilized as a theoretical framework to explore midwifery practices relating to non-supine birthing positions and the factors that encourage or inhibit this practice. Findings generated by focus groups were explored in in-depth, individual interviews (N=8) in order to triangulate findings.

Ethics: Local ethics committee approval was sought and obtained.

Results

Preliminary findings: Hospital midwives create paradigms for their setting, viewing physiological childbirth along a continuum. Promoting this is seen as central to their role. Non-supine birthing positions are utilized, often as a means of preventing or resolving pathology and this practice is associated with competent and experienced practitioners. Hospital culture can inhibit this practice. Feelings of being 'called to account' for actions that promote physiology were reported. Findings from community midwives will be available in spring 2015.

Conclusion

Conclusions: Dutch midwives need to be more aware of the importance of their role as promotors of physiological childbirth and how the setting has impact on this. Whilst the development of a physiological attitude to childbirth should start during midwifery education, experienced midwives have a role to play in the coaching of new graduate midwives, in order that they develop the necessary clinical competence and confidence to make use of non-supine birthing positions to promote physiological childbirth.

Key words: physiological childbirth, midwives, non-supine birthing positions, hospital and community settings

Presenter name: Suzanne M Thompson

031

PREPARING THE ELECTORNIC OBSTETRIC RECORDS FOR THE FUTURE. PURPOSE FOR AN OBSTETRIC-NEONATAL DISCHARGE SUMMARY BRAZILIAN STADANDARD

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Introduction

Clinical information about the birth gathers a set of data about the care provided during childbirth, postpartum and newborn care. The Obstetric-Neonatal Discharge Summary (ONDS) is a document that provides strategic information for continuity of health care to women and children. The birth health records inaugurate the history of an individual. Data such as birth weight, Apgar score, and gestational age, for example, have to be safely preserved because of the potential to impact on the future state of health and disease, during lifelong. The study proposes a minimum set of information for ONDS and its information standard, for use in Brazil.

Materials and Method

Descriptive qualitative study, interdisciplinary between medicine and computer science. Based on the analysis of numerous ONDS forms used in the country, a group of researchers from a public Federal University and collaborators proposed a standard document. The reason for obstetric admission, facts as childbirth, complications, diagnosis, current or previous illnesses and perinatal repercussion, orientations and recommendations were in this set. The final format considered government rules, international recommendations, scientific evidence and Brazilian public Health Policies. The content of the electronic document format was discussed at a national forum of experts, the Workgroup 1 of the Associação Brasileira de Normas Técnicas (ABNT). In order to preserve the semantics of clinical information, the format of data and metadata were represented in standard of information based on archetypes (ISO 13606 Standard). We used the ADL language from the free software platform LinkEHR-Ed.

Results

The ONDS has two sections, for mother and neonate hospital discharge, joint or separate. The first section intends to record the administrative information and about woman's health and current pregnancy. The second section organizes birth information and the immediate outcomes of neonates(s). Sixty-three data entries have been set for the first section, 33 mandatory. In the second section were specified 54 entries, 30 mandatory. Detailed information with all the reference model is available: http://site.medicina.ufmg.br/cins/apoio-a-pesquisa-22/projetos/. A computational model was developed for the electronic document. The ONDS was implemented in the school maternity Federal University of Minas Gerais, Brazil. At the time of hospital discharge, the woman receives a paper-version of ONDS, while the document and electronic form will be sent to the Primary Care Unit of her reference.

Conclusion

An ONDS performed with data presentation based on clinical concepts, scientific evidence, and international requirements standardization was necessary to preserve the semantics of information. In order to enable the collection, storage, retrieval, and electronic transmission of health data from computerized channels, part of the free and nature writing of health professionals was rethought and presented using structured format.

Key words: Patient Discharge; Continuity of Patient Care; Information Systems; Health Care Coalitions; Electronic Health Records.

Presenter name: Zilma S N Reis

038

Upright births at a portuguese delivery ward- a reality becoming true

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Introduction

In the Western World, as a consequence of the medicalisation of childbirth, there was also a medicalisation of the positions to give birth. As time went by there was also the loss of confidence in knowing how to support a delivery free of interventions and in positions different from those of a "medicalized" birth .
Tradicionaly in Portugal the position to delivery is the lithotomic position, professionals have the theoretical knowlegde about the use of vertical positions in the second stage of labor but there is a lack of practical knowlegde and no models in order to implement the vertical position in the second stage of labour.
This poster will present the interventions that aimed to change the practices of positioning at birth at a delivery ward in a Portuguese Maternity

Materials and Method

As methodology it was used the process of change management, through a planned change using the action learning as instrument of change, and peers to influence peers. The target was the midwifery staff at the delivery room.
A action learning process with practice based on scientific evidence, coaching of the project team,constant update to all midwifery and nursing staff produced the effect of peers influencing peers and all together contributed to the desire aim of implementing vertical position in the second stage of labor, promoting the adequacy of skilled midwifery care to the needs and desires of the women in a perspective of continuous improvement of care. We focused on non-cognitive determinants of behavior, precetive orientations, attitudes and feelings to increase acceptance of change and used strategies for empowering team members in order to make the approach to change as something that comes from below (the midwives) up and not throught a hierarchy.
Supporting the change and using the action learning are fundamental instruments to change the clinique practice.

Results

An action learning process with practice based on scientific evidence, coaching of the project team, constant update to all nurse midwives and nursing staff, produced the effect of peers influencing peers and all together contributed to the desire aim of implementing upright positions in the second stage of labour, promotting the adequacy of skilled midwifery care to the womens's needs and desires, in a perspective of contínuos improvement of care.
The strategies used for empowering team members made the aproach to change as something that comes from below (the nurse midwives) up and not throught a hierachy.The adherence of the medical team was positive, with some obstetricians performing deliveries in upright position.

Conclusion

Supporting the change and using the action learning are fundamental instruments to change the clinical practice, as well as the use of research, either the previous published research or the research produced during the process of care is a fundamental aid to the process.
In 2015 - 33,6 %of all eutocic births assisted at the unit here performed in upright position (77,5% sitting; 7% lying side;4,7% squatting;8% sitted on the bench, 1% on all four and 0,4% standing). From those births 92,3% were performed by nurse midwives and 7,7% by obstetricians.

Key words: upbright; birth; action learning; change management

Presenter name: R.Marques

039

Post-Traumatic Stress Symptoms Following Childbirth in Nigde Province, Central Anatolia of Turkey: Prevalance And Risk Factors

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Introduction

Introduction: It is now recognized that a proportion of women may perceive birth as stressful and traumatic. Post-traumatic Stress Symptoms (PTSS) can result from a traumatic birth experience and this is not the normative response. Studies have reported different results on prevalence of PTSS and this difference can likely be due to the cultural context or care system of the country. It is important to determine what the risk factors are for PTSS following childbirth.

Materials and Method

Objective: this study determined the prevalence of post-traumatic stress symptoms (PTSS) following childbirth in Nigde Province, Central Anatolia of Turkey and to identify risk factors for PTSS following childbirth by conducting a prospective longitudinal study.

Design: a descriptive, prospective longitudinal desing.

Setting: Eligible pregnant women were recruited from nine family healthcare centres in Nigde between September 2013 and July 2014. A total of 242 women completed questionnaires during their more than 20 weeks' gestational age of pregnancy and 6-8 weeks after birth.

Instruments: the data were collected using the "Demographic and obstetric information", "Prenatal Self-Evaluation Questionnaire", "Childbirth Self-efficacy Inventory", "The Wijma Delivery Expectancy/Experience Questionnaire A Version" in pregnancy, "Support and Perceived Control in Birth Scale","The Wijma Delivery Expectancy/Experience Questionnaire B version", "Postpartum Self-Evaluation Questionnaire", "The Multidimensional Scale of Perceived Social Support", "Impact of Event Scale – Revised" in postnatally period.

Results

Findings: 40.5% of women had a PTSS following childbirth. The difference between parity, planned pregnancy, urinary catheterization satisfaction with the experiences at hospital and PTSS following childbirth was significant. PTSS following childbirth was also positively correlated psychological non-adaptation in pregnancy, fear of delivery after childbirth and maternal non-adaptation in postnatal period whereas it was negatively correlated with outcome expectancy, efficacy expectancy, support and perceived control in birth, support in birth, external control, internal control. The hierarchical multiple regression model was significant and explained 29% of the variance in PTSS following childbirth scores. In this model, the strongest predictors of PTSS following childbirth were self efficacy in pregnancy, outcome expectancy, urinary catheterization, support and control in birth and maternal adaptation in postnatal period.

Conclusion

Conclusion: This study showed that the women in this sample experienced a much higher level of PTSS following childbirth in comparison to studies from other countries. Nurses and midwifes might offer pre-conception and antenatal counselling to pregnant and postpartum women in order to improve PTSS.

Key words: childbirth, post-traumatic stress symptoms, psychological wellbeing, risk factors, Turkey.

Presenter name: Gözde Gökçe İsbir

041

Elective induction of labor in low-risk women seems associated with increased maternal interventions.

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Introduction

In recent years, post-date induction of labor (40 to 42 weeks) in singleton pregnancies has increased from 28,5% (2009) to 42,3% (2013) (NPR). However, the maternal outcomes of elective induction of labor in a low-risk population in term (39 to 41 weeks) and late term (41 to 42 weeks) pregnancies are unclear.
We compared spontaneous onset of labor (SOL) and elective induction of labor (IOL) in low risk women for maternal interventions (instrumental vaginal delivery (IVD), secondary cesarean section (CS) and need for pain treatment) in term and late term pregnancies in low-risk Caucasian women.

Materials and Method

We analyzed data of the Netherlands Perinatal Registry (NPR), a linked database of 96% of all births in the Netherlands. In this retrospective cohort study we used the data from all deliveries registered from 2011 until 2013. We selected all women between 39+0 and 41+6 weeks of gestation.
To examine the association between elective IOL and maternal interventions, we compared obstetrical low-risk women with elective IOL at term and late term to women with SOL in the same groups (term and late term).
Exclusion criteria were multiple pregnancy, non-cephalic position, unengaged fetal head, known fetal congenital abnormality, oligohydramnion, decreased fetal movements, expected small for gestational age (<p10), fetal death before onset of labor, non-Caucasian ethnic origin, previous cesarean section and/or primary cesarean section in current pregnancy, gestational diabetes, pregnancy induced hypertension, pre-existent diseases (for example hypertension, diabetes mellitus, endocrine diseases, HIV) or an induction of labor on medical (fetal or maternal) indication.

The $\chi 2$-test was used for the comparison of outcomes between elective induction of labor and spontaneous onset of labor. Logistic regression analysis was used to control for confounding.

Results

The risk of an IVD after elective IOL 23.2% (24,057/103,633) in the total group is increased compared to SOL 6.5% (19,096/293,551) (OR 4.35 95% CI 4.26-4.44). Stratified for gestational age —term and late term deliveries— we also found a four times higher risk of an IVD after elective IOL compared to SOL.
For a secondary CS after elective IOL the risk was increased compared to SOL: 11.9% (12,292/103,633) versus 2.0% (5,784/293,551) (OR 6.70 95% CI 6.48-6.92). Stratified for gestational age —term and late term deliveries— we have found the same results as in the total group.
The need for pain treatment (both epidural or opioids) after elective IOL was increased compared to SOL: 14.9% (15,479/103,633) versus 1.5% (4,462/293,551) (OR 11.38 95% CI 10.99-11.77). Subdivided in epidural and opioid, we found an increased risk for an epidural (OR 13.73 95% CI 13.18-14.31) and for opioids (OR 5.38 95% CI 5.05-5.73) after elective IOL compared to SOL. Stratified for gestational age —term and late term deliveries— we have found the same results as in the total group again.

Conclusion

These findings suggest that elective induction of labor in low-risk Caucasian women —in term and late term pregnancies— will result in more interventions intrapartum than a spontaneous onset of labor.
Counseling for management of late term pregnancy should not only focus on perinatal outcomes, but also on maternal effects of elective induction of labor and possible consequences of those maternal interventions should be considered.

Key words: elective labor induction, late term, pregnancy, maternal interventions, instrumental vaginal delivery, cesarean section, epidural

Presenter name: Aafke Bruinsma

043

PREPARING THE ELECTRONIC OBSTETRIC RECORDS FOR THE FUTURE. PURPOSE FOR AN OBSTETRIC-NEONATAL DISCHARGE SUMMARY BRAZILIAN STANDARD

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Introduction

clinical information about the birth gathers a set of data about the care provided during childbirth, postpartum, and newborn care. The Obstetric-Neonatal Discharge Summary (ONDS) is a document that provides strategic information for continuity of health care for women and children. After inpatient stay, the care will be provided by primary care units and the effective communication of clinical events that occurred in tertiary care may be one of the determinants of health care quality. The birth health records inaugurate the history of an individual. Data such as birth weight, Apgar score, and gestational age, for example, have to be safely preserved because of the potential to impact on the future state of health and disease, during lifelong. The study proposes a minimum set of information for ONDS and its information standard, for use in Brazil.

Materials and Method

descriptive qualitative study, interdisciplinary between medicine and computer science. Based on the analysis of numerous ONDS forms used in the country, a group of researchers from a public Federal University and collaborators proposed a document. The reason for obstetric admission, facts as childbirth, complications, diagnosis, current or previous illnesses and perinatal repercussion, orientations and recommendations were in this set. The final format considered government rules, international recommendations, scientific evidence and Brazilian public Health Policies. The content of the electronic document format was discussed at a national forum of experts, the Workgroup 1 of the Associação Brasileira de Normas Técnicas (ABNT). In order to preserve the semantics of clinical information, the format of data and metadata were represented in standard of information based on archetypes (ISO 13606 Standard). We used the ADL language from the free software platform LinkEHR-Ed. The obstetric data entered in the System of Maternal Information (SISMater®) (1) are initially stored in the Maternity Unit database of the Hospital das Clínicas of the Universidade Federal de Minas Gerais (UFMG). The the data contained in this summary will be properly registered and transmitted at the end of inpatient stay, to then be recovered by the primary care health professional while performing the post-hospital consultation with the woman and her neonate(s).

Results

the ONDS has two sections, for mother and neonate hospital discharge, joint or separate. The first section intends to record the administrative information and about woman's health and current pregnancy. The second section organizes birth information and the immediate outcomes of neonates(s). Sixty-three data entries have been set for the first section, 33 mandatory. In the second section, were specified 54 entries, 30 mandatory. Detailed information is available on the project website (2). A computational model was developed for the electronic document. The ONDS was implemented in the school maternity the Federal University of Minas Gerais, Brazil. At the time of hospital discharge, the woman receives a paper-version of ONDS, while the document and electronic form will be sent to the Primary Care Unit of her reference.

Conclusion

an ONDS performed with data presentation based on clinical concepts, scientific evidence, and international requirements standardization was necessary to preserve the semantics of information. In order to enable the collection, storage, retrieval, and electronic transmission of health data from computerized channels, part of the free and nature writing of health professionals was rethought and presented using structured format.

Key words: Patient Discharge; Continuity of Patient Care; Information Systems; Health Care Coalitions; Electronic Health Records.

Presenter name: Zilma S. N. Reis

044

Fetal ST monitoring, towards improved perinatal outcome: a prospective and retrospective three-phase study

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Introduction

Fetal asphyxia during labour remains a major issue in obstetric care. ST analysis of the fetal electrocardiogram was introduced in 2001 as a promising technique and is now globally used. However, the most recent randomised controlled trial in the United States showed no additional value of ST monitoring in perinatal outcome. In addition, ST analysis yields many false alarms in cases of proven uncompromised fetal condition. Therefore, it seems of no value for predicting fetal distress . We proved that subtile, normal inter-patient variations in the orientation of the fetal electrical heart axis relate to the incidence of ST alarms and can explain for the fact that ST alarms not necessarily relate to the fetal condition.

Materials and Method

This is a three-phase study, performed in a tertiary care teaching hospital. 1. Prospective cohort study, 26 participants, 20-28 weeks of pregnancy. Simultaneous non-invasive abdominal fetal electrocardiogram and ultrasound recordings, resulting in an estimate for the orientation of the fetal electrical heart axis. 2. Retrospective cohort study, ST monitoring in 2719 patients during labour with a total of 4849 ST alarms. Cases of fetal metabolic acidosis were excluded (pH 12 mmol/l). 3. Case-control study, fetuses ≥ 36 weeks of gestation with intrapartum fetal electrocardiogram recordings. 10 cases with acidemia during labour (pH 7.20) were included.

Results

1. The inter-patient variations in the orientation of the electrical fetal heart axis are significant (p=0.02). This is in line with previous studies in the newborn infant. 2. The orientation of the electrical fetal heart axis affects the height of the T/QRS baseline, and therefore the incidence of ST alarms. Some fetuses have a relatively high probability of getting an ST alarm, while other fetuses have a relatively low probability. 3. We chose a relative rise in T/QRS of 70% with respect to the baseline for the alarm mechanism. This improves specificity of ST alarms from 40% to 100% (p=0.03), while sensitivity remained 90% compared to the former absolute alarm mechanism.

Conclusion

The orientation of the electrical fetal heart axis and accordingly the height of the T/QRS baseline should be taken into account in fetal monitoring with ST analysis. Analysis of relative ST events, in comparison to analysis of regular absolute ST events, improves the specificity of the alarm mechanism drastically and is probably able to reduce perinatal morbidity and mortality in the near future.

Key words: intrapartum fetal monitoring, ST analysis, fetal heart axis

Presenter name: Kim Verdurmen

045

Oral fluid intake during labour

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Introduction

The aim of the study was to find out the need for fluids during labour, amount (quantity) of oral fluid intake and the reasons for the restriction of oral fluid intake for women during labour. Further the presence of nausea and vomiting was assessed after oral fluid intake among women during labour.

Materials and Method

Respondents were 100 women during the postpartum period, after
spontaneous labour at low risk. The average length of the first stage of labour was 9 hours. 47% of respondents were primipara and others were multipara. Own designed questionnaire was used to collect empirical data and was distributed at three postpartum wards in Slovakia. Data were collected between February 2014 to March 2014.

Results

88% of women during labour (n = 88) felt the need for fluids. 41% of respondents (n = 41) was taken oral fluid in the following quantities: 100 ml or less (25%), 200 ml (29%), 300 ml (12%), 400 ml (17%), 500 ml or more (17%). As the most common reason for the limitation of oral fluid intake during labour was expressed the possibility of caesarean section. Only 2 respondents experienced nausea after oral fluid intake.

Conclusion

The need for oral fluid intake between women during labour was perceived very much. 41% of labouring women drank fluids, while 59% of women did not drink fluid (substitution IV fluids). The most frequent reason of fluid restriction was the possibility of surgical delivery (risk of Mendelson's syndrome). An increased occurrence of nausea or vomiting after fluid intake was not confirmed.

Key words: oral fluid intake, fluid restriction, labour

Presenter name: E. Urbanová

046

Risk factors for for severe birth asphyxia

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Introduction

It has been estimated that about 2 per-cent of all newborns have been exposed to significant bith asphyxia, 0,3 -0,4 per-cent to moderate or severe asphyxia causing encephalopathy or other organ damage. Up to 0,1 per-cent will die or will be permanently handicapped as a consequence of birth asphyxia.

Materials and Method

During 2009 -2011 a total of 6282 births took place in Satakunta Central Hospital, the total number of newborns was 6377.

A severe asphyxia was diagnosed, if the APGAR score of the newborn was less than 4 at the age of 5 minutes or the umbilical artery pH was less than 7,00.

According to these criteria a total number of 33 newborns (0,5 per-cent) were considered to have been exposed to severe birth asphyxia.

In order to find out risk-factors for severe birth asphyxia the maternal, prenatal and neonatal details of these newborns were compared to the corresponding figures of the total number of of newborns during 2010 (2117 neonates) in the hospital.

The results are presented in a table below.

Results

RISK FACTOR	RISK RATIO
Twin pregnancy	8.3
Vaginal breech	5.0
Previous cesarean section	3.9
IVF-pregnancy	3.8
Maternal obesity (weigfht > 100 kg)	2.1
Primiparity	1.6
Low birth weight	1.5
Induction of labor	1.4
Maternal age > 40 years	1.3
Female newborn	1.2
Impared glucose tolerance	1.0
Birth out-side office hours	0.9
Male newborn	0.8
Multiparity	0.6
Maternal weight < 60 kg	0.6
Maternal age < 34 years	0.5
Birth weight > 4000 g	0.12

Conclusion

Twin pregnancy and vaginal breech delivery seemed to be strongly associated to increased risk for birth asphyxia. Also previous cesarean delivery and IVF-pregnancy seemed to be significantly associated with the risk.

The gender of the neonate, maternal glucose tolarance or the time of the day at birth seemed not to be associated with the risk of birth asphyxia.

The birth weight of more than 4000 g seemed to protect the neonate from birth asphyxia.

Key words: birth asphyxia, twin pregnancy

Presenter name: Ari Yla-Outinen

047

INDICATIONS FOR FORCEPS DELIVERY, MATERNAL AND NEONATAL MORBIDITY AFTER FORCEPS DELIVERY IN THREE PERIODS

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Introduction

Forceps delivery was always considered to be a great obstetrical challenge. The aim of this study was to compare indications for forceps delivery, maternal and neonatal morbidity after foceps delivery in three periods.

Materials and Method

Retrospective comparative study was performed. We analysed indications for forceps delivery, parity of patients, maternal and neonatal morbidity after forceps delivery in three periods: I (1985-1988) and II (2000-2001) and III (2011-2012). Obtained data was analysed by Student's t-test. At the same time we analysed cesarean section rate in same periods. Regarding neonates we analysed average Apgar score and birthweight.

Results

In I period there were 483 forceps deliveries out of total 35.086 deliveries (1.38%), in II period 88 forceps deliveries out of total 13.186 deliveries (0.67%). In III period 33 forceps deliveries out of total 13.296 deliveries. I:II t=7.52; p<0.01, I:III t=14.90; p<0.01; II:III t=5.05; p<0.01.

Cesarean section rate in our Institute was: I period 9.2%, II period 18.81, III period 34.21%. I:II t=-25.71; p<0.01, I:III t=-56.92; p<0.01; II:III t=-30.19; p0.05, I:III t=0.51; p>0.05; II:III t=-4.03; p0.05, I:III t=3.49; p0.05.

Fetal distress: I period 35 (7.25%), II period 10 (11.36%), III 7 (21.21%). I:II t=1.15; p>0.05, I:III t=1,94; p>0.05; II:III t=1.25; p>0.05.

Maternal heart disease: I period 22 (4.55%), II period 2 (2.27%), III period 1 (3.03%). I:II t=1.23; p>0.05, I:III t=0,49; p>0.05; II:III t=-0.22; p>0.05.

Peeclampsia: I period 13 (2.69%), II period 1, (1.13%), III period 0. I:II t=1.15; p>0.05.

In I period there were one diastasis of symphysis and one uterine rupture, in II period 2 placental abruptions (2.27%) as indications for forceps delivery. No maternal deaths were noted.

Primiparous: I period 405 (83.85%), II 72 (81.18%), III period 28 (84.84%). I:II t=0,46; p>0.05, I:III t=0.15; p>0.05; II:III t=-0.40; p>0.05.

Multiparous: I period 78 (16.15%), II 16 (18.82%), III period 5 (15.15%). I:II t=-0.46; p>0,05, I:III t=0.15; p>0.05; II:III t=0,40; p>0.05.

Maternal morbidity:

Cervical lacerations: I period 141 (29.19%), II period 25 (28.41%), III period 6 (18.18%). I:II t=0.15; p>0.05, I:III t=1.57; p>0.05; II:III t=1.24; p>0.05.

Vaginal lacerations: I period 80 (16.56%), II period 13 (14.77%), III period 6 (18.18%). I:II t=0.43; p>0.05, I:III t=0.23; p>0.05; II:III t=-0.44; p>0.05.

Perineal lacerations (I/II degree): I period 19 (3.93%), II period 6 (6.82%), III period 10 (30.30%);. I:II t=1.02; p>0.05, I:III t=-3.28; p<0.01; II:III t=-2.78; p0.05%, I:III t=-1.20; p>0.05; II:III t=-0.85; p>0.05.

There was only one 4th degree perineal laceration treated with colostoma, and one vaginal haematoma.

Average Apgar score: I period 7.9, II period 7.6, in III period: 7.9.

Average birth weight in I period was 3542g, in II 3422g, in III 3503g.

Birth weight more than 3500g: I period 46.59%, II period 54.87%, III period: 48.48%. I:II t=1.38; p>0.05, I:III t=0.21; p>0.05. II:III t=0,59; p>0.05.

Neonatal morbidity:

Cephalhaematoma: I period 87 (18.01%), II period 3 (3.41%), III period: 1 (3.03%). I:II t=5.60; p<0.01, I:III t=4,33; p0.05.

Cerebral edema: I period 49 (10.14%), II period 5 (5.68%), III period: 4 (12.12%).I:II t=1.58; p>0.05, I:III t=0.34; p>0.05; II:III t=1.04; p>0.05.

Intra ventricular hemorrhage: I period 37 (7.66%), II period 4 (4.55%), III period: 0. I:II t=1.23; p>0.05.

Fracture of the clavicle: I period 31 (6.42%), II period 1 (1.14%), III period: 0. I:II t=3.33; p<0.01.

Conclusion

Indications in both periods were almost same, with no significant difference between periods. Forceps delivery rate was significantly lower in second and third period, probably due to significant rise of cesarean section rate. No significant differences in parity were found. Due to the fact that forceps deliveries in both periods were performed by skilled obstetricians maternal morbidity did not differ significantly between compared periods. Also no significant differences between Apgar score and birth weight between analysed periods were noticed. Due to better jugement and rise in cesarean section rate, incidence of cephalhaematoma and fracture of the clavicule was significantly lower in second and third period.

Key words: forceps delivery, cesarean section, indications, morbidity

Presenter name: Milos Petronijevic

048

Energetic intake during labour

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Introduction

Although the effort made in labour is comparable to athletic performance, the nutritional needs of labouring women are poorly understood. It is estimated that the excessive energy spent can be compensated by a caloric replacement. Glucose is the main substrate for the pregnant uterus with physiological requirements of 10g/h. In addition, adequate hydration improves muscle performance in prolonged exercise. Possible methods to fulfill these requirements are: infusions, sports drinks and eating. If given the choice, the majority of women choose to eat and drink. Oral intake may be a form of comfort, control and normality. A possible safe and adequate way to meet those needs is the intake of an isotonic sports drink, the focus of this research.

Materials and Method

The research conducted was a RCT in 5 hospitals in Flanders (Belgium) that investigated the effect of energetic substances during labour. Because pregnancy can induce or aggravate metabolic disorders, a comprehensive list of in- and exclusion criteria was formulated. All women that entered the labour ward and met these criteria, signed an informed consent and were allocated to the experimental group (a clear, commercial isotonic sports drink: 300mOsm/L; 7,2g carbohydrates/100ml; 40mg Na and 18mg K) or the control group (water). Due to the ethical considerations of denying food to women in labour both groups were allowed to eat and drink as desired and permitted by the hospitals. The data collection consisted of three parts: registration of all food and drinks intake, a triple quantitative questionnaire (labour ward, midwife and maternity) and clinical testing (maternal ketonuria, fetal cord blood pH, maternal and fetal blood glucose levels). All together 214 patients were included (86 to the experimental and 128 to the control group). All statistical analysis were performed using R statistical software.

Results

The energy uptake is unsufficient to meet the energy needs of the uterus the last hours before delivery. Energy intake sharply decreased two hours before delivery, with the exception of sports drinks. They are consumed more frequently closer to delivery, thereby considerably increasing the energy intake at this exhaustive moment. The significant effect on the ketone value ($p=0,05$), a measure of fatigue, dehydration and starvation, supports these results. Of all labouring women consuming a sports drink a significant (30,3% vs 45,7%;$p=0,02$) smaller number needed an infusion for labour augmentation (glucose 5% with oxytocine). Additionally, this infusion could be postponed by the use of a sports drink (154 vs 215min;$p=0,02$). Only one bottle (33O ml) is sufficient as carbohydrate supplier for 8h.

Further analysis is ongoing.

Conclusion

The first results indicate that sports drinks are an efficient source for maternal hydration and carbohydrate replacement. By improving skeletal muscle performance, invasive procedures like augmentation of labour, can be avoided or postponed and maternal satisfaction improved.

Key words: Labour, energetic intake, birth outcome

Presenter name: G Jorissen

050

ANTEPARTUM UTERINE RUPTURE IN A WOMAN WITH PREVIOUS IATROGENIC UTERINE PERFORATION: A CASE REPORT

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Introduction

Uterine rupture is a catastrophic event, life-threatening for both mother and fetus. Most cases occur in labouring women with a previous caesarean delivery. In rare occasions, a spontaneous rupture may occur in women with a scarred uterus. We report a case of spontaneous uterine rupture after iatrogenic perforation during a uterine evacuation, with good outcome. The haemorrhage was likely contained by fetal parts protruding through the laceration.

Materials and Method

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Results

A 32-year-old pregnant woman, gravida 2, para 0, presented at 34 weeks of gestation with lower right quadrant abdominal pain, radiating to the lumbar region, with no complaints of uterine contractions.

She had a history of pregnancy termination at 22 weeks of gestation due to cervical insufficiency and premature rupture of membranes 2.5 years before, complicated with retention of placental fragments. She had then been subjected to uterine curettage, during which uterine perforation was suspected, being subsequently confirmed by histological exam of the curettage product. A CT scan showed no organ damage and the situation was managed expectantly, without further complications. During the current pregnancy, a McDonald cerclage was placed at 14 weeks of gestation.

At admission, the patient was haemodynamically stable, with normal abdominal physical examination and inconclusive right Murphy's punch sign. Gynaecological examination and ultrasonography (US) revealed no significant findings; cervical length was 16mm. Cardiotocography showed reassuring fetal status and a pattern of uterine irritability. Over the 32 hours following admission, there was a clinical deterioration with the onset of an acute abdomen. Abdominopelvic US showed free peritoneal fluid, and blood tests a fall in haemoglobin level and elevated inflammatory markers. Acute appendicitis was excluded upon General Surgery observation and pelvic MRI, which led instead to the suspicion of a uterine rupture.

An exploratory laparotomy was performed, confirming the uterine rupture by the presence of a moderate haemoperitoneum and a transmural fundal tear (6cmx3cm), with protusion of fetal parts. A caesarean section was performed and the fetus extracted in pelvic presentation. The newborn presented an Apgar score of 7 at 1' and 9 at 5', weighed 2720g, and had a facial deformity, probably as a consequence of protrusion through the uterine laceration. The fundal tear was successfully repaired.

The patient received 2 units of packed red blood cells after surgery and was discharged on the 4th postoperative day without any complications.

Conclusion

Although a prior caesarean section is considered the main risk factor for uterine rupture, women with any uterine scar, including from uterine perforation, should also be considered at risk. Therefore, medical staff should keep a high level of suspicion for uterine rupture in such pregnant women presenting with acute abdomen, even before labour.

Key words: uterine rupture, uterine perforation, curettage, acute abdomen

Presenter name: Alina Seixas

052

Thoughts Feelings and Experience of Women undergoing Caesarian Section

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Introduction
There is an increase in the number of women having caesarian section at present. Caesarian section has psychological and physiological effects on the women undergoing this operation. Women share their experiences after having caesarian section in blogs. These experiences give detailed information about the process of giving birth through caesarian section. An examination of what women write in these blogs may reveal thoughts feelings and experience of the women about having caesarian section. The aim of this study was to examine stories of caesarian section written in blogs by women and to reveal thoughts feelings and experience of these women.

Materials and Method
This is a qualitative study. Blogs were searched by using the key word “caesarian section”. The search showed eight weblogs. Fifteen stories of caesarian section shared in these blogs were included in the study. The stories were read by three researchers separately and codes were determined. Categories, themes and subthemes were agreed.

Results
Three categories; 1. “before caesarian section feelings, thoughts and experiences”, 2.“soon after caesarian section feelings, thoughts and experiences” and 3. “Long after caesarian section feelings, thoughts and experiences”. Each category had the themes (positive and negative) and subthemes.
1. Before caesarean feelings, thoughts and experiences are happiness: Positive subthemes: coming together with the baby, being excited, Negative subthemes are the most difficult decision in life, not being ready, feeling like an instrument, feeling like tissue, feeling like a sheep to be sacrificed, being scared, being worried, being panicked, being nervous, inability to see the baby, inability to feel the baby, cold and soulless environment.
2. Positive subthemes of soon after caesarean feelings, thoughts and experiences are happiness, being very easy, not having pain, starting to breastfeed soon after birth, not suffering at all, being painless. Negative subthemes of soon after caesarean feelings, thoughts and experiences are not wanting caesarian section again, regretting having caesarian section, not remembering the first moment of seeing the baby, pain, sadness, shock, tiredness, being too cold, sensation of severe pain in the body, breastfeeding in awkward positions, inability to breastfeed due to pain, inability to stand without help, being in need of care, experiencing an intense pain, feeling an unbearable pain, not being able to hold the baby due to pain, experiencing great disappointment, having difficulty in breathing, experiencing back pain, seeing the baby late, not being able to touch the baby, being confined to bed, inability to produce milk just after birth, not remembering the moment of breastfeeding the baby for the first time.
3. Positive themes of long after caesarean feelings, thoughts and experiences are early recovery. Negative themes are inflammation of sutures, high fever, suffering, having undergone surgery, inability to stand up and walk soon after birth, no being able to take care of the baby comfortably, needing a long time to return to normal life, needing a long time for recovery, feeling pain, strange feeling of body posture, never forgetting the pain, not having a memory of giving birth, lack of enthusiasm for birth, post natal depression, being unfair towards the baby, being very regretful, wanting to give a vaginal birth.

Conclusion
It is clear that women experience many problems before and after caesarian section. In addition, women predominantly have negative thoughts feelings and experience. Most of women regret having caesarian section without a medical indication. Therefore, it can be recommended that health staff should encourage women to have a vaginal birth unless there is a medical indication. It is also obvious that both women and their babies have difficulty after caesarian section. That is why health professions have to be careful these problems when they make care plan.

Key words: caesarian section, thoughts, feelings, experience of women
Presenter name: Prof. Dr. Samiye Mete

053

DOES PHYSIOLOGY-BASED CTG TRAINING, USE OF FETAL ECG (STAN) AND MANDATORY COMPETENCY TESTING REDUCE INTRAPARTUM CAESAREAN SECTION RATE?

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Introduction

There is a wide variation of intrapartum emergency caesarean section rates in the United Kingdom. Use of cardiotocograph (CTG) for intrapartum fetal monitoring is associated with a significant false positive rate (60-90%) and significant inter and intra-observer variability in interpretation. This may contribute to increased intrapartum emergency caesarean section rate.

The aim of this study is to determine the effectiveness of physiology-based CTG training, use of fetal ECG (STAN) and a Mandatory Competency Testing on CTG & STAN interpretation, which were introduced in 2010 to reduce the false positive rate of CTG and inter and intra-observer variability

Materials and Method

3391 emergency caesarean sections (total births 30,865), which were performed between 2008 and 2013 at St George's Healthcare NHS Trust, London, UK were included in the study. Period prior to (2008-2009) and after (2010-2013) the introduction of mandatory competency testing and physiology-based CTG training was analysed. Total intrapartum emergency section rate as well as intrapartum caesarean sections performed for failure to progress and suspected fetal compromise were separately analysed.

Results

Intrapartum emergency caesarean section was 13% in 2008-2009 and was 10% in 2010-2013. Emergency caesarean section for suspected fetal compromise and failure to progress in labour were 24.3% and 48.45% of total intrapartum caesarean sections in 2008-2009 and 19.85% and 55.85% in 2010-2013, respectively. The operative vaginal delivery rates were similar (16.2% vs 16.8%) with a trend in reduction in neonatal deaths and hypoxic ischaemic encephalopathy (HIE) during 2010-2013.

Conclusion

Although, fetal ECG (STAN) has been in use in at St George's Hospital, London from 2002, after the introduction of physiology based CTG training and mandatory competency testing on CTG and STAN interpretation, our intrapartum caesarean section rate has reduced from 13% in 2008-2009 to 10% in 2010-2013 (the lowest reported emergency caesarean section rate in London) with the reduction of emergency caesarean section rate for suspected fetal compromise from 21.45 % to 19.85% of the total intrapartum caesarean section rate in 2008-2009 and 2010-2013, respectively. Therefore, physiology based CTG interpretation and mandatory competency testing of all users appears to reduce intrapartum caesarean sections performed for suspected fetal compromise and hence, improves the efficacy of STAN, whilst showing a downward trend in neonatal deaths and hypoxic ischaemic encephalopathy (HIE) rates.

Key words: Fetal ECG (STAN), Emergency Caesarean Section, Physiology Based CTG Training, Competency Testing

Presenter name: Edwin Chandraharan

055

Birth Environment of the Future

I. Lorentzen 1, H. Svenstrup 2, A. Fogsgaard 3

Department of Gynecology and Obstetrics, Herning, is main responsible for conducting the study, and responsible for written material to the patients, collecting the data from the patients, analyses of data, and writes the drafts on the studies.

Introduction

In the last decade, there has been an increased interest in exploring the impact of the birth environment on midwifery practice and the women's birth experiences. Results from these studies show that a home-like birth environment has positive effects on both midwifery practice and the birth experience. The hormone oxytocin that causes contractions during labour may play an important role in this context. The hormone is released when being in a safe, secure and confident environment. Therefore, it is a reasonable assumption that the birth environment also has an impact on birth outcomes.

To investigate this assumption we transformed one of our traditional labour rooms to an experimental labour room. The design off room is inspired by knowledge from evidence-based healthcare design which subscribe bringing nature into the room. Furthermore it is possible for the parents to design their own birth setting by choosing atmosphere through sound, light and nature scenes.

Materials and Method

Objective: The main purpose of this study is to explore the impact of the birth environment on women's birth experience and relevant birth outcomes in the experimental labour room.

The entire study consists of three parallel sub-projects, a randomized controlled trial, a qualitative study based on interviews, and neuro science. The use of mixed methods gives a broad evaluation of the impact of Birth Environment on patient experiences and birth outcomes. This abstract presents the RCT trial.

Design:

A randomized controlled trial will be performed. Participating women will be allocated to delivery in either the experimental labour room or a standard labour room.

Setting and participants: A total of 656 nulliparous women having a spontaneous onset of labour at the Department of Obstetrics and Gynaecology at Herning Hospital, Denmark between May 2015 and November 2016. The obstetric department is a specialized unit performing about 2500 deliveries per year.

Recruitement procedure: Nulliparas with uncomplicated pregnancies and expectant spontaneous onset of labour are informed about the study at the regular visit at the midwife in gestation week 28. Women who meet the inclusion criteria and provide consent will be randomized to either

intervention or control delivery room at the time of arriving at the labour ward for delivery. The woman and her partner stays at the allocated room during the delivery and the first hours afterwards.

Results

Main outcome measures: augmentation of labour, duration of labour, number of women having an epidural, number of uncomplicated deliveries and satisfaction with the birth experience.

Conclusion

Perspectives:

This study will be among the first evaluating Birth Environment in a randomized controlled trial. Results from this study will add new knowledge to the impact of the Birth Environment on birth outcomes

Key words: Birth environment, oxytocin, labor room design

Presenter name: I. Lorentzen 1, H. Svenstrup 2,

056

Assessment of The Effect of The Delivery Room Admission Process to Delivery Process

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Introduction

This research was carried out to be two groups as retrospective and analytic type study in order to assess the effect of the delivery room admission process of pregnant women to delivery process.

Materials and Method

Research was carried out at T. C. Ministry of Health, Public Hospitals Authority Turkey Izmir Province Northern General Secretary at of the Association of Public Hospitals Tepecik Training and Research Hospital between the dates of 1 March 2013 – 31 July 2013. All the mothers that admitted to delivery room and matching the sampling criteria were a part of sample through applying the prospect less sampling method 123 mother who were selected by improbability sampling method comprised the latent phase group, 68 mother active phase group.

The data of the research are collected through using the “Pregnant-Description Form” to specify the pregnants’ socio-demographic features, the “Identification Form of Delivery Action” to specify the delivery action process features and the effects of delivery action process to new born and “Delivery Emotion Scale” to analyse the personal emotion control of the pregnant women.

Results

The analysis of the research data was performed in computer by Statistical Package for Social Science (SPSS) package program. Number and percentage distributions of descriptive information related to pregnant women were established and tests such as Student-t test, Mann-Whitney U test, Chi-square/ Fisher Excel test were performed during analysis of the data.

According to the results of the research the mean age of mothers included in research was 23.02±4.52 years. Admission to the maternity ward, a history of pain in the latent phase group, 54.9%, in the active phase is 45.1% and a statistically significant difference was found between groups ($p<0.05$). All mothers and 42.9% of vaginal deliveries are carried out and significant difference between groups ($p <0.05$). Of the women in the latent phase is higher caesarean rates. Between the groups in terms of length of hospital stay were found significantly different (p 0.05). Group is related to the shorter duration of the active phase. Be seen between the groups in terms of new born asphyxia there is no significant difference ($p> 0.05$), but latent phase group is higher than the rate of asphyxia in new-borns. With the latent phase and the active phase group practice compared amniotomy and oxytocin in labor induction significantly different between the groups was observed (p 0.05). Oxytocin higher application rate in latent phase, amniotomy rate was higher in the active phase. Also among the groups in terms of postpartum haemorrhage and retained placenta there is no significant difference ($p> 0.05$). The average scale scores of the latent phase group 73.86 ± 14.07, of the active phase group is 76.30 ± 14.55. The average scale score was not significantly different between the groups ($p> 0.05$).

Conclusion

Consequently, it is suggested that delivery room admission criteria should be determined through using literature information, choosing the best applications through the evidences, maintaince quality and standard should be established, the advantages in increasing mother and baby health should be presented through improving the obstetric applications in positive direction, creating labour rooms and using different delivering position should be established according to delivery stages.

Key words: birth, birth phase, evidence-based practices, midwifery

Presenter name: Melek Balcık COLAK

057

Predictors for failure of vacuum assisted vaginal delivery: a case-control study

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Introduction

Vacuum assisted operative vaginal delivery is used to facilitate childbirth and to avoid cesarean section delivery and its associated morbidities in case of non-progression of the second stage of labor or fetal distress. Knowledge of indicators that are related to failed vacuum assisted delivery can potentially improve clinical decision-making, but systematic information on the subject is lacking. The objective of this study was to identify and quantify potential predictors of failed vacuum extraction.

Materials and Method

Retrospective case-control study conducted in two perinatal centers in the Netherlands. Cases were women who underwent a failed vacuum assisted delivery between 1997 and 2011. A failed vacuum extraction was defined as a delivery that was started as vacuum extraction but was converted to a cesarean section because of failure to progress. As controls we studied two successful vacuum extractions that were performed before the failed one. We used multivariable logistic regression to assess the risk for failed vacuum extraction.

Results

Between 1997 and 2011, 6,734 trials of vacuum extraction were performed of which 309 failed (4.6%). These 309 cases were compared to the data of 618 women who underwent a successful vacuum extraction. Predictors for failed vacuum assisted vaginal delivery were increasing gestational age (OR 1.2 per week), maternal height (OR 0.97 per cm), previous vaginal birth as compared to nulliparae (OR 0.32), estimated fetal weight ≥3750 g as compared to <3250g (OR 5.7), epidural analgesia (OR 3.0), augmentation (OR 1.4), failure to progress as indication for trial of vacuum delivery (OR 1.7), station of descent of the fetal head (OR 0.31 per station more descented), and occiput posterior position (OR 2.6). The area under the receiver-operating characteristic curve of a prediction model integrating these indicators was 0.83.

Conclusion

Failed vacuum extraction can be predicted accurately using both ante- and intrapartum characteristics. There is a strong need for prospective studies on the subject.

Key words: Cesarean section; operative vaginal delivery; prediction; vacuum extraction

Presenter name: C.Verhoeven

058

UMBILICAL CORD BLOOD ANALYSIS: EXPECTATION VS REALITY

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Introduction

Analysis of umbilical cord blood gases after birth helps diagnose ongoing fetal metabolic acidosis that may be associated with poor neurological outcome. Both the Royal College of Obstructions and Gynaecologists (RCOG) and American Colleges of Obstetrics and Gynaecology (ACOG) recommend cord gas measurement in all high-risk deliveries. A joint statement from the RCOG and the Royal College of Midwives (RCM) states that 'consideration should be given to measurement of cord blood gases following all deliveries'. Given the cost of settlement of claims in cases of cerebral palsy, recording this information has important medico-legal implications.

Study Objectives:

To calculate the proportion of high risk fetuses monitored using fetal ECG (STAN) who had umbilical cord gas measurements attempted or recorded at birth.

Materials and Method

A retrospective analysis of data on all high risk women monitored using STAN between 2009 and 2013 at St George's Hospital, London, was carried out. Fetuses in whom arterial and venous cord gas measurements attempted were identified.

Results

Out of 26,300 who women delivered at St George's Hospital between 2009 and 2013, 11,094 (42.2%) women were monitored by STAN during labour and data was available for analysis in 8976 women.

Arterial cord gas measurements were attempted in 5234 (58.3%) cases and arterial cord pH was recorded in 3866 (43.1%) of fetuses who were monitored using STAN. In 789 (8.8%), the attempt to obtain arterial samples failed, and in 558 (6.2%) results were obtained but not recorded. Arterial base excess was recorded in 3166 (35.3%) women.

Venous cord gas measurements were attempted in 5237 (58.3%). Venous cord pH was recorded in 4290 (47.8%) cases. In 358 (4.0%) the attempt to obtain venous samples failed, and, in 589 (6.6%) cases results were obtained but not recorded. Venous base excess was recorded in 3538 (39.4%) cases. Only 29 (0.4%) cases where cord blood pH were not estimated had an Apgar Score of <7.

Conclusion

Umbilical cord gas measurements were not attempted in 41.7% of fetuses, despite being deemed 'high risk' and monitored using fetal ECG. In 6.2%, although this analysis was performed, it was not recorded. It appears that when the neonatal outcome at birth was good, umbilical cord gas measurements were not routinely taken or recorded. Other possible reasons for failure to attempt or record include time constraints and increased workload. Although, amongst babies who did not have umbilical cord blood analysis, only 29 babies (0.4%) actually had an Apgar Score <7, failure to perform umbilical cord gases may lead to medico-legal consequences if long term neurological sequelae are subsequently encountered.

Therefore, we strongly recommend routine umbilical cord blood gases at birth irrespective of neonatal outcome.

Key words: Umbilical cord gas analysis; fetal ECG; arterial cord pH; venous cord pH; medicolegal implications

Presenter name: Dr Ayona Wijemanne

059

From postpartum hemorrhage guideline to local protocol; a study of protocol quality

M. Woiski1: H. van Vugt1; H. Scheepers 2; R. Hermens 3; and the Fluxim project group

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Introduction

Postpartum hemorrhage (PPH) has a continuously rising incidence, suggesting suboptimal care and use of the best evidence. An important step in optimizing care is the translation of evidence-based guidelines into structured and comprehensive local hospital protocols. For many care providers, these protocols are often the only guide in the prevention and management of PPH. However, knowledge about the quality of these protocols is lacking. The aim of this study was to evaluate the quality of local PPH-protocols on structure and content in the Netherlands.

Materials and Method

We performed an observational multicenter study. Eighteen local PPH-protocols from 3 University Hospitals (UH), 8 Teaching Hospitals (TH) and 7 Non-Teaching hospitals (NTH) throughout the Netherlands were acquired. The structure of the PPH-protocols were assessed using the Appraisal of Guidelines for Research and Evaluation (AGREE) Instrument. The content was appraised using previously developed quality indicators (based on international guidelines and Advance-Trauma-Life-Support (ATLS) -based course instructions).

Results

The quality of the local protocols for postpartum hemorrhage for both structure and content varied widely between different hospitals, but all of them showed room for improvement.

The protocols scored mainly below average on the different domains of the AGREE instrument (8 of the 10 items scored < 4 on a 1-7 scale). The TH scored strikingly less compared with the UH and NTH (9 out of 10 (TH), 6 out of 10 (UH, NTH) scored <4). Regarding the content, adoption of guideline recommendations in local protocols was 46%. The NTH scored least in accordance with the guideline and ATLS-based course instructions compared with the TH and UH (33% of all items present in NTH, 48% in TH, 55% in UH). In addition, a timely indication of ‘when to perform’ a recommendation was lacking in three quarters of the items.

Conclusion

This study shows that adoption of guideline recommendation in local protocols in the Netherlands is suboptimal. This makes adherence to the guideline and ATLS-based course instructions difficult. In the future more attention and assistance is needed to ensure the quality of local protocols, for example by adding model protocol, flowchart and checklist to the PPH guideline.

Key words: postpartum hemorrhage, quality of care, guidelines

Presenter name: M.Woiski

060

CTG intrapartum recording – agreement of expert obstetricians

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Introduction

The aim is to evaluate intra and inter-observer agreement of obstetricians decision making and to relate their assessment to objective neonatal outcome measure.

Materials and Method

Nine obstetricians annotated 638 recordings (552 unique). The evaluation of each record was divided into four stages (two 30 minutes windows in the I. stage, one window in the II. stage, labor evaluation). The intra/inter observer agreement was evaluated using proportion of agreement and kappa value. The sensitivity and specificity was evaluated with respect to different neonatal outcome measures (pH from umbilical artery, base deficit and Apgar score).

Results

The overall proportion of agreement was 48 % with 95 % confidence intervals (CI) (CI: 47–50). The proportions of agreement with respect to different classes were: 57 % (CI: 54–60) for normal, 46 % (CI: 44–48) for suspicious, 41 % (CI: 36–46) for pathological, and 15 % (CI: 10–21) for uninterpretable. The sensitivity and specificity of majority voting of clinicians with respect to umbilical artery pH (pH ≤ 7.05) 0.41 (CI: 0.35–0.47), 0.86 (CI: 0.82–0.90), and for base deficit (BDecf ≤ -12) were 0.50 (CI: 0.44–0.56), 0.86 (CI: 0.82–0.90), respectively.

Conclusion

The reported intra/inter observer variability, even when evaluated in respect to objective measures of the neonatal outcome, is large and this holds irrespective of clinicians experience or work place. The results from this study support the agreement for introducing computer aided evaluation of CTG records that could standardize the process of CTG evaluation within the delivery ward.

Key words: CTG intrapartum, inter-observer agreement, intra-observer agreement

Presenter name: Lukas Hruban

062

EFFECTIVENESS OF THE ADMINISTRATION OF HYOSCINE BUTYLBROMIDE (BUSCOPAN®) IN FIRST STAGE OF LABOUR IN CASE OF CERVIX RIGIDITY-PRELIMINARY RESULTS

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2) Supportive research nurse at Hospital Universitari Germans Trias i Pujol, Badalona, Barcelona, Spain.

Introduction

Midwives in our delivery ward, as in other centres, use measures to facilitate the dilatation process. As midwives must use practice based on evidence, the trial wants to shed light onto the use of Buscopan® in the first stage of labour as a dilatation facilitator.

OBJECTIVE:To evaluate the effectiveness of buscopan on cervix rigidity in first stage of labour in pregnant women assisted in University Hospital Germans Trias i Pujol.

Materials and Method

A double-blind, placebo-controlled, randomized clinical trial. After the approval of the study protocol by the Ethics Committee at University Hospital Germans Trias i Pujol (Barcelona) and the AEMPS (Spanish drugs agency), eighty-two women are to be enrolled (α:5% β:5% SD: 60 minutes). Inclusion criteria: presence of cervix rigidity during assisted labour. After obtaining informed consent, the patients are randomly assigned to receive 40mg of intravenous Buscopan® or placebo (41 patients each). The studied variables include: presence of cervical rigidity, overall time of labour, term pregnancy, active labour, and other sociodemographic data. Intervention: At the beginning of first stage of labour, midwife in charge of a woman's labour process, would inform her about the trial and would offer the chance to participate in case cervical rigidity was detected. Routine vaginal exploration in labour would lead midwives to detect those cases in which cervix rigidity appears. The diagnosis would be confirmed by a double exploration (another professional would confirm the detection of a rigid cervix).It will be confirmed that no anesthetics dose has been administrated in the last 30 minutes. Drug or placebo will be administrated diluted in intravenous physiological serum 100 ml, to be administrated in 10 minutes. For both groups, the time between drug or placebo administration and a new exploration will be 60 minutes. Then, new explorations will be every 90 minutes until complete dilatation. Statistical analysis: The U de Mann-Whitney test was applied to analyze the use of Buscopan and labour total time. The level of significance used was 5% and power 80%. SPSS v 15.0®

Results

The preliminary results, until December 2014, are based on thirty-two women (25% of the sample size) who completed first stage of labour. Mean age 30 (SD: 5.7); pregnancy weeks 38 (CI 95%: 38 - 41.6); nulipara 24 (75%), primipara 8 (25%); there was a spontaneous onset of labour in 19 cases (59.4%), and an inducted labour in 13 cases (40.6%); oxytocin and epidural anesthesia was used in 31 women. Type of birth: eutocic 19 (59.4), vacuum 2 (6.3%), forceps 7 (21.9%) and cesarea once reached complete dilatation 4 (12.5%). Cervix digital estimulation during vaginal exploration occurred in 44% of cases. Green Group: was conformed by sixteen women, cervix rigidity 60 min post-administration: six non rigid cervix, three rigid cervix, seven non collected data; first stage of labour total time: 446.25 min (SD: 171.8), Pink Group: was conformed by sixteen women, cervix rigidity 60min post-administration: four non rigid cervix, seven rigid cervix, five non collected data; first stage of labour total time: 453.44min (SD: 177.4) No statistically significant differences were found for receiving intravenous Buscopan®in the presence of cervix rigidity (p=0,178), nor for first stage of labour total time (p=0,908).

Conclusion

DISCUSSION:The analyze of a 25% of women needed to complete the sample, doesn't bring enough information to find significant differences in the results shown; nevertheless it's a first approach to the profile of women who are detected of a rigid cervix in the first stage of labour.

One of the most important results is that almost half of women had an inducted labour. Is been reported that inducted labours in our society have increased in few years to a 20% of all labours and a previous study of our investigation group analyzing the prevalence of cervix rigidity among women in labour, found significant association between induction and presence of cervix rigidity.

Another remarkable point is that the most of women chose to use epidural anesthesia and needed use of intravenous oxytocin in their delivery process. Our hospital has natural birth program sustented on the

midwives one to one care and a natural birth room provided with the necessary surveillance to make women feel as comfortable as possible.

Other results cannot be analyzed yet due to a small sample. Experimental or control groups have not been revealed yet in order keep them blinded.

Finally, the way to diagnose cervix rigidity is a controversy due to the fact that vaginal exploration is subjective and of difficult contrast. The double exploration was chosen for the diagnosis. One experienced midwives or obstetrician would first detect the rigid cervix and it would be confirmed by another experienced midwife or obstetrician.

CONCLUSION

Midwives in our delivery ward, as in other centres, use measures to facilitate the dilatation process. As midwives must use practice based on evidence, the trial wants to shed light onto the use of Buscopan® in the first stage of labour as a dilatation facilitator. These preliminary results analyze, despite being a small sample to find significant differences, offers an approach to the profile of women who are detected of a rigid cervix in the first stage of labour.

Key words: cervix rigidity, labour inducted, first stage of labour, Buscopan

Presenter name: LAURA TARRATS VELASCO

063

SUCCESFUL VAGINAL DELIVERY AFTER CESAREAN SECTION (VDAC): PREDICTING FACTORS IN A SPANISH COHORT

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Introduction

Individual risk of successful VDAC depends on multiple factors . We tried to analyse if some variables (maternal, fetal, obstetrical…) could be associated with a succesful trial of labour in women with a previous cesarean section (PCS).

Materials and Method

Retrospective cohort study conducted in General Hospital of Catalunya reviewing local database of deliveries in 2014. We selected all women belonging to Grup 5 of the TGCS1 (Vertex singleton pregnancy at term with PCS) that opted for a trial of labour. Potential predictor factors selection was based on bibliography(2 3 4) and different tools developed in last years: Age, maternal biometry, length of pregnancy, PCS indication, induction of labour and Birthweight. Chi square and Fisher tests were used for cathegorical variables. T student was used for numerical variables with normal distribution and a ROC analysis determined a cut-off value.

Results

During 2014, a total number of 149 women from Grup 5 tried to deliver vaginally. Succesful delivery was achieved in 79 of them (53.7%). No differences were observed between succesful and unsuccessful VDAC in age (35,71 vs 35,56 years, p>0.05), BMI (28.6 vs 29.32, p>0.05), length of Pregnancy (278.11 vs 277.91, p>0.05), induction of labour (OR 0.55, CI 95% 0.28 to 1.08) nor Birthweight (3416.58 vs 3444.56, p>0,05). There were statistical differences between succesful and unsuccessful VDAC in distribution of maternal height (165 vs 161; p<0,05) and PCS indication – Breech presentation (OR 2.5, CI 95% 1.03 to 6.2) and Cephalopelvic Disproportion (OR 0.41, CI 95% 0.18 to 0.95). A cut-off value of 165cm was obtained for Maternal Height (OR 3.7, CI 95% 1.8 to 7.4)

Conclusion

Maternal height (cut-off value 165 cm) and Previous Cesarean Indication (Breech presentation and Cephalopelvic Disproportion) were associated with individual probability of a succesful vaginal delivery in our population. These variables should be considered when decision about mode of delivery in women in Group 5 women must be taken.

Key words: Previous cesarean section; VDAC; predictive variables

Presenter name: Acosta J.

064

WOMEN'S EXPECTATIONS FROM DELIVERY NURSES OF VAGINAL BIRTH: QUALITATIVE STUDY

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Introduction
Women's expectations during the birth process, the women found nursing care offered during their labor insufficient. It is thought that giving information to women during labor, explaining interventions to be performed and involving women in the decisions made can be effective in reducing fear of vaginal delivery. This study aimed at revealing women's expectations from nurses while having vaginal birth.

Materials and Method
A qualitative study which has a phenomenological design. The study sample included 12 primiparous women giving vaginal birth and selected through criterion sampling. Data were collected face-to-face, a semi-structured interview form at in-depth interviews audiorecorded and transcribed. Obtained data were analyzed with the induction method based on content analysis.

Results
Results: Three main themes were obtained: physiological support needs, psychological support needs and knowledge needs. It can be concluded that the women giving vaginal birth have expectations from nurses apart from routine interventions. They expect nurses not to leave them alone, to fulfill their knowledge and personal care needs and help them to cope with the birth process.

Conclusion
It can be recommended that nurses working in delivery rooms should take account of women's abovementioned needs when they make nursing care plans.

Key words: Vaginal birth, childbirth, expectations, delivery nurse, qualitative analysis
Presenter name: Samiye Mete

065

Examining the relationship between labor pain and anxiety.

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Introduction

Labor is an important experience for women, which has effectphysical and emotional.Stress and anxiety are the main problems for women in labor. Labor anxiety effects adaptation of the fetus and woman. In this case, the labor results may be negatively affected. Labor anxiety will be increased labor pain. Labor anxiety causes hypoactive labor andextend the delivery time. Thus, increases intervention rate and operative vaginal delivery and Women's satisfaction in labor decreases. The aim; to determine the relationship between the anxiety and pain to labor.

Materials and Method

It was a descriptive study. A sample of the study 200 women who has vaginal birth at one state hospital participated. Written permission was obtained from the Ethics Committee, hospital and participants. Data was collected with the Women's Information Form, Visual analog scale (VAS), and 'state-trait anxiety scale'. Socio-demographic and obstetric characteristics were evaluated by percentage. Relationship between the supportive care in labor, labor pain and satisfaction with the labor evaluated Pearson correlation coefficient-

Results

The average age of women was 25.81. The percentage of womanprimiparousrate were 47.50 % , multiparous rate were 52.50 %. The percentages of woman unemployment rate were 85.50 %. Illiterate rate were 7 %, primary school graduates were 42 %, middle school graduates were 28 %, high school graduates were 17.50 % and university graduates were 5 %.There was no correlation between primiparous and multiparous latent and active phase pain points with state-trait anxiety scale point.

Conclusion

Research data wasobtained at postpartum clinic. Although women have beenthrough negative experiences during childbirth, their anxiety scale points were low. This may have been caused because of their lack of understanding chart.Also women's positive mood after the birth may have been effect in this. Because of women have not received any educate dealing with labor pain. They don't have anyknowledge about labor support care. This situation may be caused no significant correlation between anxiety and labor pain.

Key words: Labor pain, anxiety, vaginal birth, nursing

Presenter name: Samiye Mete

066

HYPERTENSIVE DISORDERS IN PREGNANCY WITH OR WITHOUT PREECLAMPSIA

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Introduction

Pregnancy can induce hypertension in previously normotensive women or exacerbate a pre-existing chronic hypertension. Hypertensive syndromes in pregnancy are associated with maternal and neonatal complications, depending on whether we are dealing with a hypertensive syndrome with or without preeclampsia. Fetal growth restriction, prematurity and neonatal mortality are possible complications of increased arterial blood pressure during pregnancy.

Materials and Method

Retrospective study of hypertensive syndromes in pregnancy, occurred during 2012, at Centro Hospitalar Alto Ave (n = 64). Pregnant women were divided into two groups based on the occurrence of preeclampsia (PE). The two groups were compared, using SPSS v20.0®, in terms of risk factors, obstetric complications and neonatal outcomes.

Results

Sixty-four women have been studied: 26 had PE (group 1) and 38 had a hypertensive disorder (chronic hypertension or pregnancy-induced hypertension) in which PE did not occur (group 2).

In group 1, 15.4% of PE cases were superimposed on chronic hypertension, 26.9% occurred in pregnant women previously diagnosed with pregnancy-induced hypertension, and 57.7% of cases without any previously diagnosed hypertensive syndrome. Regarding to the risk factors studied, only the frequency of nulliparity and multiple pregnancy was higher in group 1. Concerning the obstetric complications, the frequency of gestational diabetes was higher in the group 2. There were no statistically significant differences in the prevalence of fetal growth restriction, oligohydramnios and neonatal mortality. Women with PE had a higher frequency of prematurity (65.4% vs. 5.3%), a lower Apgar score at 1st minute (8.1 vs. 8.8) and a higher frequency of admissions in Neonatology unit, with longer hospital stays (7.9 days vs. 1.2 days). The frequency of newborns with birth weight below the 10th percentile was not statistically different between the two groups

Conclusion

Nulliparity and multiple gestations were more prevalent in women with PE and gestational diabetes occurred more frequently in the group without PE. Group 1 showed the worst neonatal outcomes, with a higher frequency of preterm birth and higher neonatal morbidity.

Key words: Hypertensive syndromes; Pregnancy; Preeclampsia

Presenter name: C. Ferreira

067

LATE PRETERM AND EARLY TERM DELIVERY- ETIOLOGY AND NEONATAL OUTCOMES

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Introduction

Late preterm (34 weeks- 36 + 6days) and early term (37 weeks- 38+ 6 days) deliveries are related to higher neonatal complications, as well as higher mortality and hospital readmission rates, when compared with deliveries after 39 weeks. Abnormal psychomotor development is one of the possible long-term complications.

Materials and Method

Retrospective study of singleton pregnancies, with delivery between 34 weeks and 38 weeks + 6 days of gestation, occurred in Centro Hospitalar Alto Ave- Guimarães during 2013. The onset of labor (spontaneous vs. induced), indications for labor induction, mode of delivery and neonatal outcomes were the analyzed variables.

Results

During 2013, late preterm and early term delivery rates in Centro Hospitalar Alto Ave were 5.8% and 29%, respectively. The frequency of labor induction was 32.5% in late pre terms and 23.7% in the early term births. Premature rupture of membranes, fetal growth restriction, hypertensive complications and oligohydramnios were the most common indications for pregnancy termination, in both groups. The cesarean rate was 29.1% in late preterm births and 23.4% in early term births. Regarding to neonatal morbidity, respiratory and metabolic problems were the most frequent complications, with readmission rates rounding 3% in both groups.

Conclusion

Although the risks of prematurity in these gestational ages are less than in earlier stages of pregnancy, neonatal complications are frequent. Thus, induction of labor at this point, should only be offered in selected cases in which maternal, fetal and / or obstetric diseases warrants it.

Key words: late preterm delivery, early term delivery, neonatal outcomes, labor induction

Presenter name: C. Ferreira

068

Transperineal ultrasonography for labor management: accuracy and reliability

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Introduction

The objective of this study was to determine the agreement of transperineal ultrasonographic measurements of dilatation, angle of progression, and head-perineum distance with digital examinations of dilatation, head station, and head position

Materials and Method

Women were prospectively evaluated through simultaneous examinations (79 total). Dilatation, head station, and position were recorded via digital examination whenever possible and were compared to ultrasonographic measurements of dilatation, angle of progression, head-perineum distance, and head position. Operators were blinded to each other's findings. Agreement between sonographic measurements and digital examinations was main outcome measure.

Results

Ultrasonographic assessment of dilatation correlated significantly with digital examination. The interclass correlation coefficient of the two methods was 0.82 (95% CI: 0.73-0.88). Ultrasonography under-measured cervical dilatation by a mean of 10 mm (95% limit of agreement: -36-16 mm) compared to digital examination. Angle of progression and head-perineum distance correlated mildly with palpated head stations (Pearson's correlation coefficients: 0.55 and -0.42, respectively; $p < 0.001$). Position could only be assessed in 40 out of 79 examination by digital examinations and the results showed low agreement with ultrasound results.

Conclusion

We observed good agreement between clinical assessment and ultrasound . Palpated head stations correlated mildly with angle of progression and head-perineum distance.

Key words: Transperineal ultrasonography, labor management, head station, angle of progression, agreement.

Presenter name: Erkan Kalafat

069

Induction of labor in women with a uterine scar

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Introduction

The purpose of this study was to evaluate the risk of uterine rupture following induction of labor in women with a previous cesarean section. Misoprostol was compared to other methods of induction.

Materials and Method

A retrospective cohort study of all induced women at South Hospital of Stockholm during 2009-2010 and 2012-2013. During 2009-2010 the main method of induction was vaginal PGE2; but other methods such as amniotomy, oxytocin or balloon catheter were also commonly used. In 2012-2013 the dominant method of induction was oral solution of misoprostol. Included women in this study were attempting trial of labor after one previous cesarean section (TOLAC). A total of 208 cases were included.

Results

In all 22497 births were recorded at the hospital during the study periods. 4690 (21%) inductions of labor were carried out, and among them 208 (4.4%) women with one previous cesarean section were induced and constituted our material. 47 % of the women with a uterine scar had a spontaneous vaginal delivery after induction. 9 cases (4.3%) of uterine rupture occurred in the study group. There was no significant difference in the risk of uterine rupture following the shift of method of induction from prostaglandin E2 (PGE2) or mechanical dilatation with a balloon catheter to orally administered misoprostol. All ruptures occurred in women with no prior vaginal delivery.

Conclusion

Almost every second woman with a uterine scar had a spontaneous vaginal delivery after induction .The shift to oral misoprostol as main induction method did not increase the risk of uterine rupture in the studied cohort. The main question is if we should continue to induce deliveries with an earlier CS or not. If the answer is yes, Cytotec® might be a good method for induction of labor even when one previous CS has been performed.

Key words: Induction, misoprostol, previous cesarean sectio

Presenter name: David Stenson

071

THE IMPACT OF ASSISTED REPRODUCTIVE TECHNOLOGY (ART),TO THE INCREASING THE INCIDENCE OF THE HIGH ORDER MULTIPLE PREGNANCIES

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Introduction

Aim:The purpose of this research is to determine the incidence of the high order multiple pregnancies in Kosovo, as well as the impact of assisted reproductive technology in increasing the incidence.

Materials and Method

In this retrospective study, was analyzed births protocols during 2003-2013, in Obstetrics and Gynecology Clinic / University Clinical Centre of Kosovo.The collected data was analyzed and statistical processed for results, and it was registered in special protocol.

Results

Results: From 10,286 the realized births in GOC during 2013, 97.22% (n = 10,000) were singleton pregnancies, 2.78% (n = 286) multiple pregnancies, of these 2.63% (n = 270) twins, 0.15% (n = 16) triplet pregnancy, there was not quadruplet pregnancy. The focus of the study was of the high order multiple pregnancies that represented from triplet pregnancies. By the method of conception 50% (n = 8) were triplets pregnancies that are realized by the use of ART, while 50% (n = 8) with spontaneous conception (due to unsafe system of reporting in the latter group are introduced triplet pregnancies realized by the use of medications for ovulation).The average maternal age with triplet pregnancies resulted to be 33.3 years old, while the average gestational age at birth was 31.9 weeks pregnant, although 12.5% were born before gestational week 28, 25% before 32 weeks, 62.5% were born in the middle of the week 32-35 gestation.From 16 triplets pregnancies:87.5% the born with sectio caesarea, 12.5% vaginal birth (vaginal births were emergency, with pregnant age ≤ 25 gestational weeks and weight ≤ 700 gr.). Birth weight the averages of all triplets was 1775.4 grams, where 27.08% are born with less than 1500 grams, 58.34% ≤ 2500 grams, and 14:58% ≥ 2500 grams. The Apgar test scoring for all triplets was between 5 and 6. All these results were compared with data from 2003 (the year that officially started ART in Kosovo) where the 11,065 births in GOC the realized during 2003, 98.2% (n = 10,856) were singleton pregnancies, 1.88% (n = 209) multiple pregnancies, of these 1.86% (n = 206) twins, 0.02% (n = 3) triplet pregnancies, there was not quadruplet pregnancy . From total of three triplet pregnancy: 1 was realized with the use of ART, the other 2 with spontaneous conception.The average maternal age with triplet pregnancies was 29.3 years old, while the average gestational age at birth was 31.9 weeks pregnant. From 3 triplet pregnancies: 66.7% the born with sectio caesarea, 33.3% with vaginal births.The birth weight averages of all triplets was 1422 grams, the Apgar test scoring for all triplets was between 4 and 5.

Conclusion

Conclusions: From this study resulted that the incidence of high order multiple pregnancies represented by triplets pregnancies, in Kosovo during 2013 was 0.15% or in ratio 155.5 triplets for 100,000 births.This incidence was increased to 50% more by the use of assisted reproduction technology for conception. The increasing incidence of the high order multiple pregnancies also affects old maternal age, in our study the average age was 33.3 years old. Low birth weight (LBW = 1775.4 g.) and early gestational age birth (EGAB = 31.9 weeks) of these triplet pregnancy that increased more perinatal morbidity and mortality from complications of fetal prematurity.When it became comparison to 2003, a time interval of 10 years turned out that the incidence of triplet pregnancies from 2003 to 2013 was increased to 5.7 times more. Was remark also an increase in the average maternal age with triplets pregnancy for 4 more years as it was in 2003, that is a contributing factor to the increasing incidence of high order multiple pregnancies.There was no difference between the average gestational age at birth of triplet pregnancies from both years were studied

Key words: multiple pregnancies, ART, Incidence.
Presenter name: Astrit M. Gashi

072

Outpatient versus inpatient induction of labour with Foley catheter

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Introduction

Induction of labour is one of the commonest obstetric interventions. There are several reports comparing different methods but there is insufficient data about the effectiveness and safety of outpatient induction. The purpose of this study was to compare clinical effectiveness, safety and maternal satisfaction between outpatient (OP) and inpatient (IP) cervix priming with Foley catheter (FC).

Materials and Method

A non-blinded prospective randomized study was conducted between January 2014 and December 2014 at a tertiary hospital. Inclusion criteria were: term pregnancy with a single foetus in cephalic presentation, Bishop Index (BI) < 6, gestational age (GA) > 41 weeks or medical indication for induction of labour. Patients were randomized to outpatient (n = 32) or inpatient (n = 30) cervix priming with FC. Indication for elective caesarean delivery, spontaneous labour, hydramnios, nonreassuring cardiotocogram, multiple pregnancy, rupture of membranes, active vaginal bleeding, indication for prophylaxis of Streptococcus group B infection, HIV infection, cervical injury or previous caesarean section with recurrent indication were exclusion criteria.

The primary outcome was to compare the variation of BI (difference between BI before and after application of FC) between outpatient and inpatient groups. Secondary comparisons included: mode of delivery, induction-to-delivery time, inpatient time, sequential use of prostaglandins, infection and maternal pain.

Maternal pain associated with the introduction and permanence of FC was determined with the visual analog scale for pain (VAS), before the introduction of the catheter and again after its removal or extrusion.

Statistical analysis was performed using the Mann– Whitney U and $\chi 2$ tests. $P < 0.05$ was considered statistically significant.

Results

Demographic data did not differ between groups. Average variation of BI was not statistically different between the inpatient and outpatient groups (3.75 Vs. 2.90) nor vaginal birth rate (68% OP Vs. 70% IP), total induction to delivery time (39.7 hrs Vs. 37.2 hrs) and sequential use of prostaglandin (68% Vs. 70%). Maternal satisfaction during priming time was evaluated by the mean variation of VAS score and did not differ between groups (0.64 OP Vs. 1.21 IP, p = 0.23).

Two cases of chorioamnionitis were recorded for each group without additional morbidity. There has been no maternal mortality or neonatal morbidity or mortality.

Conclusion

Foley catheter is as safe and effective in the outpatient as in the inpatient cervical priming, with mild pain associated with the procedure for both settings.

Key words: induction, Foley catheter, mechanical methods

Presenter name: Catarina Policiano

073

Is there still a place for mechanical methods in labour induction?

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Introduction

Induction of labour with mechanical methods for term pregnancy with unfavourable cervix has been demonstrated to be as effective as induction with prostaglandins but with lower rates of tachysystole. The aim of this study was to analyse the efficacy and safety of induction of labour with Foley catheter (FC).

Materials and Method

A prospective observational study was conducted at a tertiary hospital, including all cases of induction of labour with FC between September 2013 and December 2014. Women were eligible if they had a singleton pregnancy with a Bishop Index (BI) < 6 and a gestational age (GA) > 41 weeks or a medical indication for induction of labour. Indication for elective caesarean delivery, spontaneous labour, hydramnios, nonreassuring cardiotocogram, multiple pregnancy, rupture of membranes, active vaginal bleeding, indication for prophylaxis of Streptococcus group B infection and HIV infection were exclusion criteria. The primary outcome was the variation of BI (difference between BI before and after insertion of FC). Mode of delivery, induction-to-delivery time, tachysystole with foetal decelerations, infection, maternal pain, maternal and neonatal morbidity and mortality were also analysed. Maternal pain associated with the introduction and permanence of FC was evaluated with the visual analog scale for pain (VAS), before the introduction of the catheter and again after its removal or extrusion.

Descriptive statistical analysis was performed using the SPSS version 19.0.

Results

Within 132 inductions with FC, average change in Bishop score after catheter placement was 3 (0-7), with only 4% (5/132) of unmodified cervix after catheter removal. The mean variation of VAS before and after cervical priming with FC was 1 (range 0-8). Vaginal delivery rate was 70% (93/132) but in women with a previous caesarean section (n =21) was 33% (7/21). Average induction-to-delivery time was 34 hours (4-120). Infection rate was 3% (4/132). There was only one case of significant vaginal bleeding which required immediate catheter removal. Seven cases of tachysystole, four of them with changes in foetal heart rate were reported during sequential administration of prostaglandins. There has been no global maternal mortality or neonatal morbidity or mortality.

Conclusion

Foley catheter is a safe and effective method of cervical priming for women with an unfavourable cervix, even in the case of a previous caesarean delivery.

Key words: induction of labour, Foley catheter, mechanical methods

Presenter name: Catarina Policiano

076

An Audit on the Management of SROM at Term

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Introduction

Objectives:

To check compliance with local guidance and the National Institute for Health and Care Excellence (NICE) guideline for management of spontaneous rupture of membranes (SROM) at term. To determine the risk of infection and discover the complications associated with SROM at term.

Materials and Method

Methods:

A proforma was created and used to carry out a retrospective case note analysis of 98 patients over 4 months from July-October 2014. We used the induction of labour (IOL) register in the Delivery Suite to record names of patients booked for IOL with confirmed SROM. Exclusion criteria included patients already in established labour, multiple pregnancy and rupture of membranes at <37 weeks.

Results

Results:

We found that 76% patients went into spontaneous labour within 48hours of SROM. 38% of women required IOL. 22% of patients developed pyrexia in labour which is higher than quoted by NICE as being only 1 %. Only 57% of these patients had both blood cultures and antibiotics. The risk of pyrexia was higher after 24 hours of SROM with only 14% of patients with pyrexia delivering within 24 hours. Amongst patients with pyrexia, the LSCS rate was 43% and assisted delivery rate was 24%.These patients also had a higher rate of maternal complications, blood transfusion, prolonged hospital stay, pelvic abscess formation and 69% of these babies required neonatal unit (NNU) care.

Conclusion

Conclusions:

The risk of Chorioamnionitis increases after 24 hours of SROM and presentation could vary. Women should be counselled in view of higher risk of both maternal and fetal infection and complications and aim for planned IOL after 24 hours. Local guidance is being updated in order to ensure our infection rates improve.

Key words: Induction, Labour, Chorioamnionitis, SROM

Presenter name: Dr Fatima Taki

077

MIDWIFERY GROUP PRACTICE MODEL - BENEFITS BEYOND THE RELATION

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Introduction

The last 40 years of maternity care in Denmark has offered a standard model of antenatal and intrapartum care by midwives working at a hospital based birthing center. In recent years it has been a political decision to implement another model of maternity care as a supplement to the standard care.

Our Midwifery Group Practice Model uses caseload midwifery care, and the type of enrolled women varies. For the local governing region in which our birthing center is located, the goal is to offer this model for up to 25% of expectant mothers choosing both hospital and home birth. In the near future it will include women with e.g anxiety or depression. We offer the model for both primi- and multiparous women. The midwives work in 4 teams of 2-3 midwives, there are aprox. 500 women enrolled each year (120-125 women for each team) which is part of the 4500 births assigned to the hospital. The Group Practice Model is providing care during pregnancy, delivery and a short postnatal period.

Materials and Method

We have collected and analysed empirical data from the past 2 years working with the Midwifery Group Practice Model and compared with the birth cohort from our hospital for differences in results.

Results

Since introducing the Midwifery Group Practice 2 years ago, the results and experiences have been comparable with international studies.

It shows that continuity of care/carer through pregnancy, delivery and postnatal period care offers increased satisfaction for both the women and the midwives.

Through pregnancy the women have the antenatal care from the 'named' midwives. Throughout labour the woman have one of her own team midwives assisting her. Postnatal care includes home visits and/or a visit at the postnatal clinic.

Caseload midwifery offers a stronger relationship between midwife and woman and a continuity of care which is beneficial in all aspects of maternity care. This helps the midwife to differentiate her care often allowing for e.g easier labouring.

Our work shows a tendency towards a decreasing need for augmentation e.g drips during labour.

It also shows that the home birthrate have almost doubled in the 2 years we have worked in a Group Practice Model (from 1-2%).

Conclusion

We believe that Midwifery Group Practice/ Caseload midwifery Models could play a significant role in the future maternity care, because of the increasing rates of normal deliveries with less intervention and higher satifaction for women and midwives and at the same time high quality outcomes. The Midwifery Group Practice is focusing on differentiated care to achieve equality of health rather than equality of care.

Giving women the choice to have continuity of care/carer will provide benefits far beyond the birth of their child. That being whether giving birth in a hospital setting or at home.

Key words: caseload midwifery, continuity af care, patient satisfaction

Presenter name: A. Moltved & E. Soenderskov

078

Foley catheter versus delayed labour induction in term premature rupture of membranes: FOCUS-PROM trial – prelimary report

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Introduction
The aim of this randomized study was to compare 2 protocols for inducing labor in women with premature rupture of membranes (PROM) at term.
Materials and Method
Ninety-two women with rupture of membranes and a Bishop score ≤5 were randomly assigned to induction of labour with a 70 mL Foley catheter (n=45) or 24 hours delayed intravenous oxytocin infusion (n=47).
Results
The average interval from PROM and delivery was similar in both groups (1228 minute v 1313 minutes; p=0.28). Oxytocin administration was necessary only in 3 women (7%) in Foley catheter group compare to 14 subjects (30%) in delayed induction group. Vaginal delivery occurred in 37 (82%) women with Foley catheter insertion and 35 (74%) delayed oxytocin infusion subjects. Maternal and neonatal outcomes were similar between the groups. The incidence of chorioamnionitis and neonatal antibiotic administration was low in both groups.
Conclusion
Foley catheter is an effective alternative to delayed oxytocin infusion for labour induction in women with an unfavourable cervix in term premature rupture of membranes.
Key words: PROM, induction of labour, Foley catheter
Presenter name: D. Bomba-Opon

079

ADNEXAL TORSION IN THE THIRD TRIMESTER OF PREGNANCY: A CASE REPORT

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Introduction

Adnexal torsion (AT) is the total or partial rotation of the adnexa around its vascular axis or pedicle. Complete torsion causes venous and lymphatic blockade leading to stasis and venous congestion, haemorrhage and necrosis. It is a rare cause of acute abdominal pain during pregnancy and the clinical, laboratory and imaging findings are non-specific, thus leading to the possibility of mistaking it for other acute abdominal conditions (such as appendicitis, renal colic, cholecystitis and bowel obstruction). The major risk factors for AT are ovarian stimulation for in vitro fertilization, ovarian masses and previous history of AT.

Materials and Method

Objective: Addressing an issue concerning a clinical case.
Methods: Systematic review and report of a clinical case.

Results

A 30-year-old woman at 36 weeks and 6 days of gestation was admitted to the hospital with a sudden onset of severe right lower quadrant abdominal pain. There was no history of nausea, vomiting, diarrhoea, fever, urinary complaints or other symptoms. In the current pregnancy, she conceived spontaneously and her 1st and 2nd trimesters were uneventful. Her past medical and surgical history included: in July/2008 caesarean section due to suspicion of fetal-pelvic disproportion (that pregnancy was achieved after ovarian stimulation treatments and was complicated by gestational diabetes); in August/2011 bilateral ovarian cystectomy (histopathology report showed benign mucinous and serous cystadenomas of the ovaries). Transabdominal ultrasound revealed cystic lesions in both adnexal regions (the largest on the right side with 13x13cm) with multiple septations. All blood tests were within normal limits. With the presumptive diagnosis of AT, a caesarean section was performed, followed by pelvic exploration. She delivered a living male baby with 2720g and an Apgar score of 9 and 10 at the 1st and 5th minute, respectively. A 13x18cm necrotic right ovarian cyst twisted around its pedicle and a 9x10cm left ovarian cyst were found. Taking these findings into account, a right salpingo-oophorectomy and a left cystectomy were performed without complications. After an uneventful postoperative period, the patient was discharged on the 5th day. Histopathological examination reported ovarian mucinous and serous cystadenomas, producing similar findings with the previous report.

Conclusion

AT in pregnancy is increasing in frequency due to the growing prevalence of ovarian stimulation treatment. Diagnosis is difficult and therefore a high index of clinical suspicion is required. Missed diagnosis of AT could not only lead to ovarian necrosis and sepsis, but also endanger the pregnancy. Therapeutic management of this clinic situation remains controversial and dependent on gestational age. Although an ovarian cyst can be easily removed until 28 weeks of gestation, from this gestational age onwards it is not readily accessible and may precipitate preterm labour. The laparoscopic approach combined with simple detorsion has been described; however, laparotomy and salpingo-oophorectomy may sometimes be necessary.

Key words: Adnexal torsion; Pregnancy

Presenter name: S. Borges-Costa

081

WHICH ARE THE MAIN OUTCOMES CORRELATED TO THE DURATION OF PASSIVE AND ACTIVE PHASES OF SECOND STAGE OF LABOR?

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Introduction

The influence of progressive duration of passive and active phase of second stage on maternal and neonatal complications remains unclear. Studying the two phases separately may make it possible to determine which phase is correlated with an increase risk of adverse outcomes. This finding could have important clinical implications, favouring the practice of either early or delayed pushing, or limiting the duration of expulsive efforts.

Objective of the study is to assess maternal and neonatal outcomes according to the duration of passive and active phases of the second stage of labor.

Materials and Method

We conduced a retrospective study of all nulliparous women with singleton fetus in cephalic presentation at term (GA ≥ 37 ws) who delivered in our Department between January 2011 and September 2014. Women who underwent elective caesarean section or cesarean section during the first stage of labor were excluded.

Main maternal and neonatal outcomes were analyzed according to the duration of passive and active phases of second stage of labor; each phase was equally divided in three time intervals (0-60, 61-120,>120 min). All variables were evaluated using Chi Square for Trend; p value < 0.05 was considered significant.

Results

A total of 3254 women were included.

Passive second stage was observed in 1168/3254 (35.9%) of cases.

With the increase of the duration of both passive and active phases of second stage there was a reduction in the rate of spontaneous vaginal deliveries ($p < 0.001$) and a rise in the rate of cesarean sections, operative vaginal deliveries and episiotomy ($p < 0.001$); a higher use of oxytocin and epidural analgesia were founded ($p < 0.001$).

We observed a higher risk of postpartum hemorrhage (> 500 ml) with increasing of both passive and active second stage duration ($p = 0.041$ and $p= 0.004$, respectively). III-IV degree perineal tears were more frequent in women with a longer active stage ($p < 0.001$).

Any perinatal outcome (such as UA pH < 7.00, Apgar 5' < 5 or perinatal hypoxia) resulted correlated with the duration of passive or active phase of second stage.

Conclusion

The increasing of the duration of both passive and active phases of second stage of labor is correlated to a higher risk of obstetric interventions and postpartum hemorrhage, without affecting substantially neonatal outcomes.

Key words: second stage, duration, labor, outcomes

Presenter name: Cristina Plevani

083

PROLONGED SECOND STAGE OF LABOR: DOES IT AFFECT MATERNAL AND NEONATAL OUTCOMES?

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Introduction

In literature there is insufficient evidence to determine when the second stage of labor is prolonged, and associated with enough complications with continuing labor so as to justify either operative vaginal delivery or cesarean delivery. The aim of this study was to assess maternal and neonatal outcomes in case of prolonged second stage of labor, defined according to 2011 RCOG guidelines

Materials and Method

We conducted a retrospective study of all nulliparous women with singleton fetus in cephalic presentation at term (GA ≥ 37 ws) who delivered in our Department between January 2011 and September 2014. Women who underwent caesarean section during first stage of labor were excluded. According to 2011 RCOG guidelines, second stage of labor was defined prolonged with a duration longer than 2 hours without epidural analgesia or longer than 3 hours if epidural analgesia was used (total of passive and active second stage of labor). Main maternal and neonatal outcomes were analyzed; p value < 0.05 was considered significant.

Results

A total of 3254 women were included. Prolonged second stage was observed in 239/3256 women (7.3%). In the prolonged second stage of labor group we observed an older maternal age ($p < 0.001$), a higher use of oxytocin and episiotomy ($p < 0.001$); moreover women with prolonged second stage were at a higher risk of operative vaginal delivery ($p < 0.001$). No differences were observed in the blood loss and in the rate of severe postpartum haemorrhage. Among perinatal outcomes there was a significant difference in neonatal birth weight and in the rate of neonatal asphyxia ($p < 0.001$ and $p = 0.049$) between the two groups. At multivariate analysis maternal age, use of oxytocin and neonatal birth weight were independently correlated to prolonged second stage of labor.

Conclusion

The presence of a prolonged second stage of labor was associated with a higher use of oxytocin, episiotomy and a lower probability to achieve spontaneous delivery, with an increase in the rate of operative vaginal delivery; whereas, it was not correlated to postpartum haemorrhage. Maternal age, use of oxytocin and neonatal birth weight were independent correlators of prolonged second stage of labor.

Key words: Prolonged second stage of labour; operative delivery; postpartum haemorrhage

Presenter name: Serena Mussi

085

UTERUS DIDELPHYS AND OBSTETRIC OUTCOMES - a case report

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Introduction

Uterus didelphys is a congenital malformation where the uterus presents as a paired organ. This results from a non fusion of both Mullerian ducts, giving way to the existence of two independent uterus and their respective cervices. Each uterus has a single horn linked to the ipsilateral fallopian tube that faces its ovary. According to the ESHRE ESGE classification system (2013), this condition belongs the U3b class. This women often have good reproductive outcomes. A septated vagina occurs in 75 percent of cases and may cause difficulty with sexual intercourse or vaginal delivery. Affected women may opt for resection of the vaginal septum. Pregnancy associated with didelphic uterus usually needs cervical cerclage and/or the administration of tocolytic agents to come to term. However pregnancy may occur and progress successfully without intervention. The prior diagnosis of these cases allows for a better obstetric surveillance and the optimization of intrapartum care.

Materials and Method

We present a case of singleton pregnancy in the uterine body of the left side in a didelphys uterus.

Results

32 years old, nulipara, with a history of uterus didelphys with two cervices and a complete longitudinal vaginal septum (classified as U3bC2V1 of the ESHRE ESGE classification system) diagnosed at 15 years of age, that wished to become pregnant. Two months after ceasing oral contraceptives she had a positive pregnancy test. During the gestation she had no complications, having developed the pregnancy in the left uterine cavity. At 35 weeks and 5 days she was admitted to the labour ward in active labour. Digital vaginal examination revealed a cervix dilated to 5 cm, cephalic presentation, Hodge 2, left occiput anterior (LOA) position, and membranes still intact. The septum was palpable from the side of the cervix to the vaginal introitus, consistency was elastic and thick. During the second stage of labour, the septum deviated to the right and there was no need to remove it. A right medio-lateral episiotomy was performed. She had an eutocic delivery, giving birth to a male infant, weighing 2360 grams. Apgar scores were 9 at the first minute and 10 at the fifth minute. After delivery, a grade I tear was found at the base of the vaginal septum with edema and excoriation of its distal portion. We discussed with the patient the intention to remove the vaginal septum, which she refused. We proceeded to suture the septum and the episiorrhaphy. There were no complications post birth.

Conclusion

Uterine malformations often presupposes a dystocic labour by diminished uterine contraction capacity, fetal malpresentation, IUGR, oligoamnios or even an obstacle to the passage of the birth canal caused by a vaginal septum. However, in some cases, as the one described, the optimal conditions are present. With good communication with the patient a conservative expectant management is possible and normal vaginal delivery achieved.

Key words: Uterus didelphys, anomaly, Mullerian ducts, vaginal septum, vaginal delivery

Presenter name: Filipa Rafael

086

IMMUNOPROTECTIVE EFFECTS OF INCHALED NITRIC OXIDE IN NEWBORNS WITH RESPIRATORI DISEASE ON MECHANCALLY VENTILATION.

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Introduction

This study presents the results of the influence of inhaled nitric oxide (iNO) on the immune system of infants with respiratory diseases on mechanically ventilation (MV).

Materials and Method

In a controlled, randomized, blind clinical trial included 37 newborns with respiratory diseases on MV. Group I (n=20) patients receiving iNO (10 ppm, 24 hours; «Pulmonox mini», «Messer II NO Therapeutics», Austria). In Group II (n=17) did not receive iNO. At admission and at 3-5 day was studied subpopulations of lymphocytes by the one-parameter immunophenotyping using reagents company Immunotech Beckman Coulter (USA): CD3, CD4, CD8, CD14, CD19, CD34, CD56, CD69, CD71, CD95 monoclonal antibody, the relative content of Lymphocytes in apoptosis using AnneksinV+labeled FITK and propidium iodide (PL+), labeled with PE (Saltag, USA), with the results on the cytometer Beckman Coulter Epics XL (USA). The statistical power of the study was 80 % ($\alpha \leq 0.05$).

Results

In Group I on 3-5 day was registered an increase mature monocytes (CD14+) 23.1±0.8% ($p<0.05$); reduction in the relative content of CD69 3.8±0.21%, lymphocyte of apoptosis: AnnexinV-FITC+PI- 7.12±0.46%, AnnexinV-FITC+PI+ 0.79±0.07% ($p<0.001$). Duration of MV was 4.1±1.4 days (18±3.4 in Group II). All newborns survived and were not septic complications. None of the patients showed clinical or laboratory evidence of adverse effects of iNO. In Group II: fatai outcome 7 newborns, the Incidence of Sepsis – 5.

Conclusion

Inhaled NO in newborns on M.V. increase in the relative content mature macrophages and decreased the lymphocytes in apoptosis; decreased the Incidence of Sepsis and Fatal Outcome, as well as the duration of MV.

References.

Key words: Inhaled NO, apoptosis, newborn

Presenter name: M. Puhtinskaya

087

ACUPUNCTURE IN THE THERAPY INCOMPLETE PREGNANSI.

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Introduction

Incomplete pregnancy remains a major problem in today's health worldwide. In order to decrease the frequency of preterm birth conducted randomized controlled clinical trial of the efficacy and safety the acupuncture therapy threat of abortion in primigravidae in the III trimester.

Materials and Method

Included 299 pregnant women with regular complaints of abdominal pain, uterine contractile activity. In group 1 (n=145) acupuncture not performed. In group II (n=154) 10 days stimulate points MC-7, RP-6, TR-5, R-6 on the side of placenta, 30 minutes. Randomization was performed by the method of envelopes. At admission and on day 10 were studied: uterine activity (mehanogisterografiya, CTG, "Sonomed-200", Russia), blood flow in the arteries of the uterus, the umbilical cord, fetal middle cerebral artery (ultrasound and Doppler, «Toshiba SSA- 340", Japan); plasma levels of estriol, placental lactogen and cortisol (enzyme immunoassay, Victor, Finland). Statistical power of 80%

Results

On admission, the patients in both groups noted: uterine artery vasospasm ipsilateral placenta and umbilical and fetal middle cerebral artery, low level of estriol, placental lactogen, high levels of cortisol. On day 10 the negative dynamics was observed in 12% of women in group I for all parameters ($p<0,05$). In group II, 90% of patients showed normalization of uterine tone, blood flow in the arteries of the umbilical cord, uterus, fetal middle cerebral artery, levels of cortisol, estriol and placental lactogen ($p <0,05$). There was no negative effect of acupuncture on the pregnant woman and the fetus. Births 38-42 weeks gestation have occurred: group I - 53.1%, in II - 81,1% of women ($p <0,05$).

Conclusion

Stimulation of acupuncture points with MS-7, RP-6, TR-5, R-6 on the side of the placenta is an effective and safe method of nonmedicamentous of therapy incomplete pregnancy

Key words: Incomplete pregnancy, acupuncture therapy.

Presenter name: O. Romanova

088

CAUSES OF ANTEPARTUM STILLBIRTH IN WOMEN OF ADVANCED MATERNAL AGE

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Introduction

The average age at childbirth in most European countries is increasing, and more women are giving birth over the age of 35 years.

Women over 35 years are at higher risk of antepartum and intrapartum stillbirths and neonatal deaths. Antepartum stillbirth is particularly important in this group of women, because they are relatively unlikely to have future pregnancies. The largest increase in risk of stillbirth for women over 35 years of age starts at 39 weeks and peaks at 41 weeks.

There is a small literature on why women of advanced maternal age have an increased risk of antepartum stillbirth. Fretts et al performed a retrospective study of the rates of specific causes of fetal death in women < 35 years and women ≥ 35 years between 1961 and 1995. They found that women ≥ 35 years of age had an increased risk of fetal death due to infection, less common causes of stillbirth such as cord pathology and unexplained fetal death than younger women (OR 2.2).

Materials and Method

An observational study was performed to breakdown the causes of antepartum stillbirth by maternal age in the UK using anonymised national data on 2850 cases of antepartum stillbirth in 2009 . The association between cause of stillbirth and maternal age was examined using an adjusted multinomial logistic regression model. Risk ratios were calculated relative to stillbirth due to haemorrhage.

Results

Stillbirths in women over 35 years old are more likely to be due to major congenital anomalies (Relative Risk Ratio (RRR) 2.0, 95% CI 1.3-3.0), mechanical causes (RRR 1.6, 95% CI 1.0-2.6), maternal disorders (RRR 2.1, 95% CI 1.2-3.6) or associated obstetric factors (RRR 2.1, 95% CI 1.1-3.9) than women less than 35. Women over 35 have a statistically significant increased risk of stillbirth due to major congenital anomalies (OR relative to live birth 1.6, 95% CI 1.3-1.9) and maternal disorders (OR 1.7, 95% CI 1.2-2.4) than younger women. Women over 35 were 30% more likely to experience a term stillbirth than women < 35 years (OR 1.3, 95% CI 1.1-1.5). Stillbirth due to congenital anomaly was statistically significantly more likely in women ≥ 35 years.

Conclusion

Advanced maternal age is a significant risk factor for antepartum stillbirth particularly at term. Attention should be given to stillbirth due to mechanical causes, maternal disorders and associated obstetric factors in such women. Congenital anomaly is associated with an increased risk of term antepartum stillbirth in women over 35.

Key words: Advanced maternal age; antepartum stillbirth; aetiology.

Presenter name: Dr K Walker

089

CHILDBIRTH EXPERIENCE QUESTIONNAIRE: VALIDATING ITS USE IN THE UNITED KINGDOM

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Introduction

The Childbirth Experience Questionnaire (CEQ) was developed in Sweden in 2010 and validated in 920 primiparous women. It has not been validated elsewhere.

Measuring the impact of an intervention on a woman's childbirth experience is arguably as important as measuring its impact on outcomes such as caesarean delivery and perinatal morbidity or mortality and yet surprisingly it is rarely done. The lack of a robust validated tool for evaluating labour experience in the UK is a topical issue in the UK at present. Indeed NICE say 'A standardised method to measure and quantify women's psychological and emotional wellbeing and their birth experiences is urgently required to support any study investigating the effectiveness of interventions, techniques or strategies during birth.'

Materials and Method

The Childbirth Experience Questionnaire and part of the Care Quality Commission Maternity Survey (2010) was sent to 350 women at one month postnatal. The CEQ was sent again two weeks later. The CEQ was tested for face validity among 25 postnatal mothers. Demographic data and delivery data was used to establish construct validity of the CEQ using the method of known-groups validation. The results of the scored CEQ sent out twice were used to measure test-retest reliability of the CEQ by calculating the quadratic weighted index of agreement between the two scores. Criterion validity was measured by calculating the Pearson correlation coefficient for the CEQ and Maternity Survey scores.

Results

Face validity of the CEQ in a UK population was demonstrated with all respondents stating it was easy to understand and complete. A statistically significantly higher CEQ score for subgroups of women known to report a better birth outcome demonstrated construct validity of the CEQ. A weighted kappa of 0.68 demonstrated test-retest reliability of the CEQ. A Pearson correlation co-efficient of 0.73 demonstrated a strong correlation between the results of the CEQ and the results of the 'gold standard' assessment of childbirth experience in the UK: the Maternity Survey and hence criterion validity of the CEQ.

Conclusion

The Childbirth Experience Questionnaire is a valid and reliable measure of childbirth experience in the UK population.

Key words: Childbirth experience questionnaire; content validity; criterion validity; construct validity; test-retest reliability; birth satisfaction

Presenter name: Dr K Walker

090

THE 35/39 TRIAL: A RANDOMISED TRIAL OF INDUCTION OF LABOUR VERSUS EXPECTANT MANAGMENT FOR NULLIPAROUS WOMEN OVER 35 YEARS OF AGE

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Introduction

European women are increasingly delaying childbirth. Women over 35 years of age are at a higher risk of perinatal death. Women over 40 years old have a similar stillbirth risk at 39 weeks as women who are between 25-29 years old have at 41 weeks.

In a UK survey of obstetricians 37% already induce women aged 40-44 years at term. A substantial minority of parents support such a policy, but others do not, concerned it might increase the risk of Caesarean section. However a recent systematic review of induction of labour versus expectant management in women with intact membranes at term, found that a policy of induction of labour was associated with a reduction in the risk of caesarean section (OR 0.83, 95% CI 0.76-0.92).

If induction for women over 35 did not increase Caesareans, it would plausibly improve perinatal outcome and be an acceptable intervention.

Materials and Method

The 35/39 trial is a multi-centre, prospective, randomised controlled trial. We aim to recruit 630 nulliparous women aged over 35 years, over two years who will be randomly allocated to either:

- Induction of labour between 39 0/7 and 39 6/7 weeks gestation.
- Expectant management i.e. awaiting spontaneous onset of labour unless a situation develops necessitating either induction or Caesarean Section.

The primary purpose is to establish what effect a policy of induction of labour at 39 weeks for nulliparous women of advanced maternal age has on the rate of Caesarean section deliveries.

Results

The trial began in July 2012. We have currently recruited 600 participants. The trial is on course to finish at the end of February 2015. The results will be analysed in March and ready for presentation.

Conclusion

The 35/39 trial is powered to detect an effect of induction of labour on the risk of caesarean section, it is underpowered to determine whether it improves perinatal outcome. The current study will also act as a pilot for a larger study to address this question.

Key words: Induction of labour, Advanced maternal age, Perinatal outcome, Caesarean delivery

Presenter name: Dr Kate Walker

091

THE EXPERIENCES, TIMING, FREQUENCY, REASONS, URGENCY AND CLINICAL OUTCOMES FOR WOMEN WHO CHANGED THEIR PLANNED PLACE OF BIRTH OR TRANSFERRED FROM PRIMARY MATERNITY UNITS TO A TERTIARY MATERNITY HOSPITAL

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Introduction

Little is known about how women experience a change in plans or transfer from a planned birth in a primary maternity unit (PMU) to a tertiary maternity hospital (TMH). We explored this and also examined the outcomes for women of these changes during the antenatal or pre-admission, pre and post-admission labour and postnatal time periods. All women received continuity of midwifery care regardless of plan changes or their intended or actual birthplace.

Materials and Method

The Evaluating Maternity Units (EMU) prospective cohort study used a mixed method methodology and collected clinical outcome, survey and focus group data. Participants were well, pregnant women booked to give birth in a primary unit or tertiary hospital in New Zealand (2010-2012).

Results

There were 407 women in the PMU cohort and 285 in the TMH cohort.

- Four themes emerged relating to transfer: 'not to plan', control, communication and 'my midwife'. The interplay between the themes created a cumulatively positive or negative effect on women's experience. Their experience of transfer in labour was generally positive, and none expressed trauma with transfer.
- Of those who planned a PMU birth 47% gave birth there. Of the 28.5% of women who changed their planned birthplace type antenatally, 62% were due to a clinical indication.

Most (73%) labour changes occurred before admission in labour to the PMU, the most common reason was rapid labour (24%) or PROM (24%). Of the 27 (12.6%) who transferred in labour from PMU to TMH 96% were nulliparous women. Of these 78% transferred for "slow labour progress", and 63% were 'non-emergency' transfers. The mean 'emergency' transfer time was 58 minutes. The mean time for all labour transfers from specialist consultation to birth was 4.5 hours.

- After adjustments, PMU women were significantly more likely to have a vaginal birth, spontaneous labour onset, no analgesia and physiological management of the third stage than TMH women. PMU women were significantly less likely to have instrumental vaginal birth, labour augmentation and an episiotomy compared to the TMH cohort. The cohorts had similar rates of PPH, induction, caesarean section and other perineal trauma. There were no significant differences in the measured neonatal outcomes of Apgar score <7 at 5 minutes, need for resuscitation, admission to neonatal unit, perinatal mortality, birthweight, gestational age or breastfeeding rates.

Conclusion

The women understood the potential for plan change or transfer, although it was not necessarily wanted or planned. When they maintained a sense control, experienced effective communication with caregivers, and support and information from their midwife, the transfer did not appear to be experienced negatively. Birthplace changes were not uncommon. Most changes were due to the development of complications or 'risk factors'.

Most transfers were not urgent and took approximately one hour from the decision to transfer from the primary unit to arrival at the tertiary hospital. Despite the transfers the neonatal clinical outcomes were comparable between both cohorts; however, the rate of maternal morbidity was higher in the tertiary hospital cohort.

The model of continuity of midwifery care in New Zealand appeared to mitigate the negative aspects of women's experience of transfer and facilitate positive birth experiences.

Key words: Place of birth, primary maternity unit, tertiary maternity hospital, transfer, outcomes, women's experiences

Presenter name: Celia Grigg

092

Contribution to the analysis of Caesarean Section rates using Robson's 10-group Classification, from the study of women with previous Caesarean Section, at a University Hospital

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Introduction

The increase in Caesarean Section (CS) rates is a global reality and the search for actions that promote the reduction of those considered unsuitable became a strategy in public health policy in several countries. Routines to avoid the first CS and support the vaginal birth after previous CS are considered effective means to reach this goal. The use of Robson's classification (1) allows an analysis of the practices in services and the construction of targets to ensure safe obstetric care with acceptable rates of CS. The study of groups 1 to 4 allows a careful analysis of the first CS. Group 5 (women with singleton pregnancies, term, cephalic presentation who had previous CS - STC-PC), includes a set of heterogeneous situations that limit the analysis of the care and the compliance with the protocols. This study looks specifically at group 5, in a historical series of cases of CS births, aiming the improvement of protocols and targets in the assistance to previous CS women in labor.

Materials and Method

Cross-sectional study with analysis of all births that occurred from January to December 2014 at the Hospital das Clínicas, UFMG, in Belo Horizonte, Minas Gerais, Brazil. The study was approved by the Ethics Committee of UFMG (CAAE 10286913.3.0000.5149). Clinical data were collected in the SISMater (2), a Hospital's own electronic information system, which also automatically generates the 10-group Classification. The medical team, preferably, the person responsible for the care provided, performs the inclusion of clinical data in this system. Information considered incomplete or inconsistent was corrected after a data consistency analysis from the clinical documentation stored on paper. Group 5 of the Robson's Classification was selected for analysis and divided into 2 subgroups for qualitative analysis: subgroup 5a, composed of women who had one previous CS; subgroup 5b, composed of women with two or more previous CS. In this analysis of the group 5a the definition of low and high-risk pregnancy (3) was also considered.

Results

From a total of 2060 births, 2048 presented information enabling Robson's classification. The overall CS rate was 37.5%. Group 5, STC-PC was composed of 321 women, of whom 263 (81.9%) had CS birth. This group accounted for 15.9% of all women that had a CS birth and 35% of all CS performed, and it was the group that more impacted the overall rate. The caesarean rate in women of the subgroup 5a was 75.8% (179/236), while in subgroup 5b the rate was 99% (84/85). Patients with high risk pregnancy represented 57.8% and 58.1% of women in groups 5a and 5b, respectively. The analysis of group 5, subgroup with low risk pregnancy, identified that 41.3% of the women (31/75) were admitted with gestational age of 41 weeks in accordance with the protocol of the Hospital. In the other side, the pregnant women admitted before 41semanas, 63.8% (28/44) were admitted in spontaneous labor and 36.4% (16/44) were not. Data analysis showed that 45.5% (20/44) of women with low risk pregnancy and less than 41 weeks gestational age were submitted to CS, in contradiction to the institution's protocol, and the CS indication was only the previous CS.

Conclusion

We suggest that the Group 5 of Robson's classification should be divided into two subgroups: one with women who had one previous CS and other with women who had two or more CS. This approach seems more suitable for the construction of actions and targets to reduce CS in women with previous CS. In addition, qualitative analysis of the cases of low risk and high risk pregnancies allows a refinement of institutional interventions to achieve the safe delivery with acceptable rates of CS.

Key words: Caesarean section, Robson classification, classification system, vaginal birth after Caesarean, Health Care ; Information Systems

Presenter name: Regina A. L. P. Aguiar

093

ST-ANALYSIS: RELATIVE VERSUS SIGNIFICANT ABSOLUTE ST EVENTS

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Introduction

The STAN method generates alarms (ST events), based on changes in the ST segment of the fetal electrocardiogram (fECG). Depending on subjective cardiotocography (CTG) classification, these alarms are significant or not. Meta-analyses showed that the STAN method failed to lower metabolic acidosis rates.
Previously, we found that variation of electrical heart axis between fetuses yields different baseline T/QRS values and that higher baseline values are associated with more ST events, irrespective of neonatal outcome.
We hypothesized T/QRS rises as a percentage from baseline (relative ST events) would compensate for this variation and improve ST analysis.
Previously, we observed that alarming based on relative ST events is more accurate than based on absolute events. In this study we aim to compare accuracy of relative ST events with significant absolute ST events (including CTG classification and biphasic events).

Materials and Method

A case control study with 20 healthy term fetuses. Cord arterial pH was < 7.05 in 10 cases and pH was >7.20 in 10 controls. Intrapartum fECG was obtained with a scalp electrode (Goldtrace, Neoventa Medical, Mölndal, Sweden), a maternal skin electrode and a STAN S31 monitor (Neoventa Medical, Mölndal, Sweden).
Two experienced obstetricians and STAN trainers classified each 20-minute CTG recording preceding any absolute ST event (reported in Event Log). FIGO CTG classification rules were followed. They were blinded to postpartum pH values and relative ST values. Discrepancies that yielded different ST event classification, were resolved by discussion.
Absolute ST analysis (STAN method) was positive if at least one significant ST event emerged.
Relative ST analysis (our method) was positive if the relative T/QRS rise exceeded 70% at least once.
Test characteristics (sensitivity, specificity, diagnostic odds ratio (OR), positive and negative likelihood ratios (LR+ and LR-)), and confidence intervals were determined and compared using McNemar's test.

Results

54 absolute ST events occurred in 16 patients (3 episodic, 48 baseline, and 3 biphasic ST events). The observers agreed in 85% of CTG fragments. In cases 29% of events were significant, in controls 19%. 33% of episodic, 27% of baseline and 0% of biphasic events were significant. In our population, relative versus absolute ST analysis showed:
sensitivity of 90% (55 – 100) vs. 70% (35 – 93),
specificity of 100% (69-100) vs. 70% (35 – 93),
LR+ of infinity vs. 2.3 (0.8 – 6.5),
LR- of 0.1 (0.0 – 0.6) vs. 0.4 (0.2 – 1.2),
and OR of infinity vs. 5.4 (0.8 - 36.9).
McNemar showed no statistical significant difference between sensitivity and specificity of both methods. Median time-to-delivery interval from the first event was 4 hours and 8 minutes in relative and 14 minutes in absolute ST analysis.

Conclusion

We observed a non-significant trend towards better sensitivity and specificity in relative ST analysis compared to absolute ST analysis. Relative ST analysis showed substantially better positive and negative likelihood ratios. Thus, relative ST analysis is a promising method for fetal monitoring and deserves further evaluation.

Key words: ST analysis, Fetal electrocardiography, cardiotocography, fetal monitoring, metabolic acidosis, T/QRS, sensitivity and specificity, diagnostic accuracy

Presenter name: A.D.J. Hulsenboom

094

THE FIRST MINUTES OF LIFE.

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Introduction

It is vital the way how the first moments after birth is live. Scientific evidence shows the importance of looking after these first minutes, for physical and mental health of the newborn and the bond created with parents. The WHO recommendations, the various reviews and clinical practice guidelines show the benefits of skin contact, late cord clamping and many other aspects to consider at this time.

OBJECTIVES:

- Know the scientific evidence on the optimal care in the first minutes of life.
- Know the benefits of the application of this care.
- Establish updated in the maternity service protocols.
- Health education for health professionals.
- Health education to new parents.

Materials and Method

Literature review of the different databases: Cochrane, Medline, Cuiden, and different clinical practice guidelines.

Results

Scientific evidence shows the importance of caring much the first minutes of life of the newborn. Some of the most important parameters are:

- Ensure delivery of low instrumentation.
- Care for the environtment where the birth occurs: temperature, light, heat, noise ...
- Seek medical personnel working with the minimum necessary.
- Facilitate skin contact with the mother, and if not possible with the father.
- Encourage breastfeeding.
- Do not separate the newborn from the mother at any time. Make the care of newbornswithout separating..
- Foster an atmosphere of intimacy in the first minutes of life of newborn.

Conclusion

Adequate attention in the first minutes of life is essential for the proper development of the newborn. The skin contact is vital, intimate contact inherent in this place (habitat) evokes neurobehaviors ensuring fulfillment of basic biological needs. This time may represent a "sensitive period" psycho-physiologically to schedule future behavior.

The fact that maternity service professionals aware of these benefits, it is of great importance because of the way they act depends on the correct development of the process of birth. Therefore, maternity services should be updated according to the recommendations protocols and the evidence; to sensitize healthcare presonal.

At the same time, programs of preparation for motherhood, expectant parents should receive information and tips that promote the first minutes of life in the most optimal manner to ensure proper neuronal, psychological and physical development of the newborn.

Key words: Newborn. Midwife. Skin contact. New parents.

Presenter name: MARIA CARMEN ROIG GARCIA

096

UMBILICAL CORD PROLAPSE – A FOUR-YEAR EVALUATION

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Introduction

Umbilical cord prolapse complicates less than 1% of all pregnancies. It is an obstetric emergency, requiring early recognition and prompt management. Although associated with certain maternal and fetal characteristics, such as multiple gestation, spontaneous rupture of membranes and breech presentation, most of these risk factors cannot be predicted or changed.

Materials and Method

Retrospective observational study from 2010 to 2014, including all cases of umbilical cord prolapse after fetal viability listed in the delivery ward records of a tertiary care university hospital. Recognizable risk factors along with obstetric and neonatal outcomes were analyzed.

Results

Twelve cases of umbilical cord prolapse were recorded. Most women were multiparous (58,3%), only two of them had a previous cesarean section. Gestational age at delivery ranged from 29 to 41 weeks (mean 37±3,8 weeks). Three of the cases occurred in preterm deliveries, one of them after spontaneous rupture of membranes of the first fetus (breech presentation) of a twin gestation. Of all term fetuses, only one had a low estimated fetal weight (P9,7). There were no cases of polyhydramnios. Eight cases occurred after iatrogenic rupture of membranes. After the diagnosis of umbilical cord prolapse, cord reduction was attempted with success in one case (cervix 9 cm dilated) and the fetus was delivered vaginally. All other deliveries occurred by emergent cesarean section under general anesthesia. Only two newborns had an Apgar score bellow 7 at 1 minute, but neither of them had fetal acidemia. There were no fetal or neonatal deaths.

Conclusion

Even though umbilical cord prolapse compromises fetal circulation, prompt diagnosis and management play a key role in favorable outcomes as shown in our study. This rare but unpredictable emergency supports the principle that all deliveries should take place in facilities prepared for emergent cesarean section.

Key words: umbilical cord prolapse, emergency, cesarean section, rupture of membranes

Presenter name: A. Fonseca

097

DELIVERY OUTCOMES IN OBESE HEALTHY WOMEN

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Introduction

Maternal obesity is a well-known risk factor for obstetric complications such as gestational diabetes and hypertensive disorders of pregnancy. However, normotensive and glucose-tolerant obese pregnant women are also at risk for complications with associated maternal and neonatal morbidity. This study aims to assess obstetric and neonatal outcomes in obese, but otherwise healthy, pregnant women.

Materials and Method

Case-control study from 2011-2014, including pregnant women with a Body Mass Index (BMI) ≥ 30 and with singleton low-risk pregnancies without any complications, whose prenatal care took place at our low-risk prenatal care visits. The control group consisted of women with a BMI < 30, selected in a 2:1 proportion from our low-risk prenatal care visits database. We analyzed pregnancy, labor and delivery characteristics as well as newborn and postpartum data.

Results

This study comprised data from 106 obese women and 212 controls. A higher proportion of nulliparous women was seen in the control group (63,2% in the non-obese group versus 50,9%, p 0,04). Previous cesarean delivery was more common in obese women (17,0% versus 9,0%, p 0,042), as was prior fetal macrosomia (8,5% versus 1,4%, p 0,003). During the current pregnancy, obese women gained less weight than their normal weight counterparts (10,1±6,2 versus 13,5±5,2, p <0,0001). Gestational age at delivery was similar in both groups (40 weeks, p 0,372). Nevertheless, preterm delivery was more common among obese women (6,6% versus 0,5%, p 0,002; OR 14,9 [1,8-123,0]). Obese women also had a higher induction of labor rate (36,8% versus 22,2%, p 0,007; OR 2,0 [1,2-3,4]). Obese women were more likely to deliver by cesarean (37,7% versus 17,5%, p 0,0001; OR 2,9 [1,7-4,9]) and in this group intrapartum cesarean rate was the highest. Labor length was comparable in both groups as were shoulder dystocia and third degree lacerations rates. Neonatal outcomes were also equivalent. Postpartum complications were similar in obese and non-obese women.

Conclusion

Obesity is an important risk factor for preterm delivery and need for labor induction, carrying also a higher risk for cesarean delivery.

Key words: obesity, cesarean section, delivery rates, labor complications, preterm delivery, labor induction

Presenter name: A. Fonseca

098

BREECH PRESENTATION – VAGINAL VERSUS CESAREAN DELIVERY: WHICH INTERVENTION LEADS TO THE BEST OUTCOMES?

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Introduction

Breech presentation occurs in 3-4% of all term pregnancies. The best mode of delivery of a breech fetus is still highly controversial. At this time, most breech fetuses are delivered by cesarean. This study intends to compare maternal and neonatal outcomes between vaginal and cesarean term breech deliveries.

Materials and Method

Multicentric retrospective cohort study of single term breech fetuses delivered vaginally or by elective cesarean delivery from January 2012-October 2014. The primary outcomes were maternal and neonatal morbidity or mortality such as postpartum hemorrhage and other obstetric complications and Apgar score below 7, fetal trauma and admission to the Neonatal Intensive Care Unit (NICU), respectively.

Results

Sixty five breech fetuses delivered vaginally were compared to 1262 delivered by elective cesarean. Nulliparous women were more common in the cesarean delivery group (24,6% in the vaginal delivery group [VDG] versus 69,3% in the cesarean delivery group [CDG], p<0,0001]. Gestational age at birth was significantly lower in the VDG (38±1 weeks versus 39±0,8 weeks [37-41] in the CDG, p 0,0029). The fetuses delivered vaginally had a significantly lower birth weight (2928±48,4g in the VDG versus 3168±11,3g in the CDG, p<0,0001). Apgar scores below seven on the first and fifth minutes were more likely in the group delivered vaginally (Apgar < 7 in the 1st minute: 18,5% in the VDG versus 5,9% in the CDG, p 0,0006; OR 3,6 [1,9-7,0]; Apgar < 7 in the 5th minute: 3,1% in the VDG versus 0,2% in the CDG, p 0,0133; OR 20, 0 [2,8-144,4]), as was fetal trauma (3,1% versus 0,3%, p 0,031; OR 9,9 [1,8-55,6]). Two cases of brachial plexus paralysis, one of them associated with fetal skin incision, were recorded in the vaginal delivery group against one iatrogenic fetal skin incision, two cases of fetal ecchymosis and hematoma, one with hip dislocation, and one iatrogenic fracture of the humerus in the cesarean delivery group. Neither group had cases of fetal acidemia. Admission to the NICU, maternal postpartum hemorrhage and the incidence of other obstetric complications weren't significantly different between groups.

Conclusion

Vaginal breech delivery was associated with lower Apgar scores and higher incidence of fetal trauma. However, neonatal admission to the NICU and maternal outcomes were similar.

Key words: breech presentation, cesarean section, vaginal breech delivery, neonatal outcomes

Presenter name: A. Fonseca

099

UTERINE RUPTURE AND DEHISCENCE IN PREGNANCY - 12 YEAR EXPERIENCE AT A PORTUGUESE HOSPITAL

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Introduction

Uterine rupture and dehiscence are rare complications, with the potencial to cause important maternal and neonatal morbidity and mortality. The incidence is low (0.005-1%), and is higher among women with previous uterine scar, particularly women who undergo trial of labor after previous cesarean section; rupture of the unscarred uterus is extremely rare and more common in less developed countries (related to higher parity, long labors and limited access to emergency obstetrical care).

Our goal was to analise the cases of uterine rupture and dehiscence at our Department, with particular focus on the incidence, risk factors and complications.

Materials and Method

We conducted a retrospective observacional study of the pregnant women with the diagnosis of uterine rupture and dehiscence between 2003 and 2014 (12 years), using the information contained in the clinical files. Data analysis was performed using Numbers 3.2® (Apple Inc., EUA).

Results

There were 41587 births and 18 cases of uterine rupture and dehiscence (0.04%) in the period studied; the rupture was parcial (dehiscence) in 50% of cases. The average maternal age was 34.6 years; 10 women were primiparous and 8 were multiparous; there were no nulliparous women with uterine rupture. The risk factores identified were: previous uterine scar/procedure (17), labor induction (6) and augmentation with oxytocin (3) in women with previous uterine scar, grand multiparity (3) and hydramnios (1). The most frequent previous uterine procedure was cesarean section (15), with inter-delivery intervals varying between 18 months and 11 years. The birth was by cesarean section in 15 cases, the most frequent indication being non-reassuring fetal status (5). The diagnosis of uterine rupture was intraoperative in 16 cases (15 at the cesarean section and 1 at postpartum exploratory laparotomy). The complications identified were: 1 fetal death, 1 postpartum hemoperitoneum and 1 postpartum bleeding. Conservative treatment was possible in the majority of cases (16), but in 2 cases hysterectomy had to be performed.

Conclusion

In the 12 years studied, there were 41587 births and 18 uterine ruptures and dehiscences (0.04%); it is a rare complication, and the most important risk factor identified was previous uterine scar/procedure, the most frequent being previous cesarean section. These results are in concordance with information found on current literature.

Key words: Uterine rupture; uterine dehiscence; previous cesarean section

Presenter name: Laura Reis

100

Oral given Cytotec® - an effective and safe method of labor induction

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Introduction

According to WHO recommendations Misoprostol (Cytotec®) has an important role in obstetric care where one important application is labor induction. 15-20 % of all fullterm, singletons pregnancies in Sweden are induced.

The aim of this study was to compare the differences between the previously used methods for labor induction and the use of Misoprostol (Cytotec®). And if Cytotec® can be used as the primary choice of induction taking rate of vaginal delivery, length of delivery and fetal outcome into consideration.

Materials and Method

Study design: This is a retrospective cohort study performed at South Hospital, Stockholm where induction methods and delivery outcome were compared among 4342 women with, cephalic presentation, singleton pregnancies induced at gestational age ≥ 34 weeks. During

2009 - 2010 the primary method of induction at the hospital was Minprostin® (prostaglandin), or dilatation of the cervix with a balloon catheter. During 2012 -2013 the first choice was 25 ug of Cytotec® (Misoprostol) given as an oral solution every second hour, totally eight times, as the first-line option for induction of labor.

Results

Results: 4342 (2026/2316) induced deliveries were included and compared.

-Frequency of spontaneous vaginal deliveries increased with 17 % ($p < 0.001$) --

-No difference in active time of labor was found between group ($p = 0.8$)

-No difference in frequency of new-born's delivered with Apgar < 7 at 5' was shown ($p = 0.2$)

Conclusion

Induction of labor with Cytotec®, given as an oral solution to drink every second hour, is effective and a safe method of induction.

It gives a higher rate of spontaneous vaginal delivery without affecting length of delivery or fetal outcome.

Key words: Induction of labor,Cytotec, cesearian section,

Presenter name: Tove Wallström

101

Effects on women's birth stories of women giving birth with using HypnoBirthing method

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Introduction

HypnoBirthing method physiologically and psychologically prepare women for the birth. It is observed that the use of this method and it's positive effects of birth is increasingly widespread. Women share their birth process experiences in various internet blocks. Shared these stories on the internet blocks that are closely followed and observed that women wrote many comments on these stories. Learning women how they affected read stories of women by this hypnobirthing birth will help health care professionals to plan care.Sharing birth stories in the internet blocks by women who used hypnobirthing method in birth process how affected the other women that read this stories. Our aim is to investigate birth stories impact on women read.

Materials and Method

Qualitative research design was used. In the study 'HypnoBirthing', ' HypnoBirthing Birth' keywords were used for searching the internet blocks. After scanning we reached two internet blocks. Shared all the birth stories were read in these sites. Reached nine story using the HypnoBirthing method of birth delivery. The sample of the study consisted of 107 comments made nine birth story. All stories and comments on this story read by each researcher and codes were identified. Researchers individually determine the category of themes and sub-themes Then they discussed and were rebuilt category, themes and sub-themes.

Results

Based on our studies 'Awareness' and 'Positive Emotions' categories and 'health care team', 'the information', 'the natural birth', 'the preparedness', 'birth' and 'sharing' themes were identified. Awareness categories's themes and sub-themes are as follows. In the healthcare team theme; understand the importance of team, to search doctor, nurse and midwife, understand the importance of team selection, the importance of trust to team, in the information theme; to share information, to search course, in the natural birth theme; believe in the importance of natural childbirth, natural childbirth request, believe in naturalness, in the preparedness theme; prepare themselves, understand the importance of birth. Positive emotions categories's themes and sub-themes are as follows. In the birth theme; excitement, happiness, hope, impatience for birth, the desire to have a baby again, in the sharing theme; feel that she is not alone, feel supported, take courage, trust her body for natural childbirth.

Conclusion

It was determined that the women birt stories who gave birth using HypnoBirthing philosophy has increased the awareness of other women. In addition, this birth stories has affected positively women's thoughts and feelings. The sharing of positive birth stories have increased other women's giving birth request and courage. According to these results it is recommended that women birt stories who gave birth using HypnoBirthing philosophy should reach more women.

Key words: hypnobirthing, birth, stroies, effects
Presenter name: Merve Ertuğrul

102

Perinatal results in a cohort of second twins after internal podalic version and breech delivery

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Introduction

The internal podalic version is an obstetric manoeuvre consisting in manually turning the second twin into a podalic presentation within the uterus during a vaginal twin delivery. It can be used when the second twins adopts a transverse situation or in a vertex presentation when the head is not engaged in the maternal pelvis. It is a very complex obstetric procedure that enables vaginal delivery when the second twin is not vertex, allowing to reduce the number of cesarean deliveries in twin gestations. However, perinatal results in the second twin are still poorly studied.

This study aims to analyse the perinatal results after second twin delivered using an internal podalic version with breech extraction, comparing the with the results to the first twins.

Materials and Method

We analysed a retrospective cohort of 176 twin gestations who delivered vaginally in a tertiary care centre during a period of two years. Maternal characteristics and pregnancy complications are recorded. We calculated the proportion of pair of twins needing this manoeuvre, and the rate of failure of the procedure, which supposed a combined delivery (first twin vaginally and second, by caesarean section). We compared the perinatal adverse results attributable to delivery, which were pH in Umbilical artery, Apgar score less than 7 in the fifth minute of life, need for admission in the Neonatal Care Unit and length of stay.

Results

A total of 176 twin deliveries were attended in our centre from 1st January 2012 to 31st December 2013. An internal podalic version and/or breech extraction was performed in 25/176 cases. The manoeuvre was successful in 21/25 cases (84%), and a combined delivery was required in 4/25 cases (16%). There was not statistically significant difference in the pH in Umbilical artery after birth between first and second twins. No Apgar scores lower than 7 in the fifth minute of life were registered. From the 25 pair of twins, 15/50 babies were admitted in the Neonatal Care Unit. Mean length of stay was 18,3 days for first twins and 17 for second twins, this difference not being statistically significant. No orthopaedic lesions or fractures were registered

Conclusion

Internal podalic version with breech extraction is a safe manoeuvre when performed for a trained Obstetrician. It allows vaginal progression of delivery in most cases without worsening perinatal results in the second twin

Key words: internal podalic version; twin delivery; perinatal results

Presenter name: Laura Pérez Martín

103

Intrapartum uterine rupture in a tertiary referral center

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Introduction

Uterine rupture is a rare but serious obstetric complication, carrying an increased risk of maternal and perinatal morbidity and mortality. In developed countries, more than 90% of cases involve rupture of a previous cesarean scar.

The objective of this study was to ascertain the incidence of intrapartum uterine rupture, examine the predisposing factors and maternal and perinatal outcomes of patients managed at our institution.

Materials and Method

We studied all women diagnosed with uterine rupture in our institution between January 2000 and December 2014. Data on predisposing factors and maternal and perinatal outcomes were retrospectively collected. A descriptive analysis of data was made.

Results

During the study period, 62222 women gave birth at our institution. Uterine rupture occurred in 52 of these women, making the incidence of uterine rupture 0.8 per 1000 deliveries. Of all uterine ruptures, 81% occurred intrapartum and of those 36% of patients were symptomatic, with vaginal bleeding, abdominal pain and/or absence of fetal movement.

The average age of occurrence of intrapartum rupture was 32 years. All but one woman had at least one previous birth and 3 of them had no previous cesarean section (of those, 2 were gemelar pregnancies). 8 cases occurred before 37 weeks of gestation. One women has had previous uterine rupture.

Previous caesarian and induction of labour were the main risk factors.

Surgery was the mainstay of treatment and in two women hysterectomy was performed.

9 infants had Apgar score less than 7 at the fifth minute. Perinatal death occurred in 9%. There were no maternal deaths.

Conclusion

The incidence of uterine rupture in our institution complies with the literature. Previous cesarean section and induction of labor are associated with an increased risk of rupture.

Nevertheless, we must be aware of the classic signs and symptoms of uterine rupture even in women without a prior cesarean section.

Key words: uterine rupture, intrapartum obstetric emergencies

Presenter name: Ana Galvão

104

PREGNANCY IN A WOMAN WITH PULMONARY HYPERTENSION – A CASE REPORT

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Introduction

Pregnancy in women with pulmonary arterial hypertension (PAH) is known to be associated with a high maternal mortality.

Materials and Method

Results

An 18 year old pregnant woman comes to our Hospital for the first time at 21 weeks. In the consultation she refers to dyspnea aggravation in small efforts, in the last month, associated with dry cough and easy tiredness. She also refers pelvic pain which has intensified in the last 3 days with the cough. From the medical background we found an abandonment of a cardiology appointment in another Hospital, for PAH associated with congenital heart failure and the suspension of medication containing sildenafil and bosentan.

The physical findings were dyspnea at rest, tachycardia and 70% oxygen saturation in ambient air. Cardiac examination was changed. Signs of augmented uterine tonus when abdominal palpation was performed. The gynaecologic exam showed protrusion of the membranes through the external orifice of the cervix which, at digital vaginal examination, had 3 cm of dilatation and was in extinction during the uterine contraction. The echography showed a normal amniotic fluid and an existing fetal heart activity. Exams were performed and after discussion between a multidisciplinary team, it was noticed a situation of type 1 respiratory failure and decompensated heart failure due to severe decompensated PAH, probably because of therapeutic non-fulfilment and pregnancy.

It was concluded that it was a maternal lifesaving situation with indication for a termination of the pregnancy, thus accelerating the process of abortion already in motion.

A computerized angiotomography, to exclude any pulmonary thromboembolisms, was requested. Cardiopulmonary arrest in the imagiology service culminating in death, 8 hours after coming in for a medical consultation.

Conclusion

The physiological changes that occur during pregnancy and the peri-partum seem to be poorly tolerated in patients with PAH.

PAH is associated with a high maternal mortality, estimated between 30 and 56%. Therefore, is regarded a contraindication for pregnancy and these women are usually advised to terminate the pregnancy, even if the woman is in a good clinical condition.

When pregnancy occurs and termination is declined, pregnancy and delivery should be managed by a multidisciplinary team with experience in the management of both PAH and high-risk pregnancies.

This case came to show the fatality of the presence of PAH in a pregnant woman who, probably, by occultation of the pathology and willingly, became pregnant. In its approach there was a need for the articulation between a multidisciplinary team, which still couldn't reverse the evolution of the disease, in an advanced and decompensated phase.

In conclusion, because PAH is associated with high mortality and morbidity risks for the pregnant, women with that condition should be counselled in early adolescence about pregnancy risks and appropriate contraception.

Key words: pulmonary arterial hypertension, congenital heart failure, obstetric, pregnancy, high mortality

Presenter name: Patrícia Alves

105

Placenta Percreta: Diagnosis and Prevention of postpartum hemorrhage and urologic injuries. A case report

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Introduction

The use of ureteral stent preoperatively placed by a urologist, and bilateral prophylactic occlusion balloon catheters placed in both internal iliac arteries could decrease the incidence of massive hemorrhage and high risk of ureteral injury during cesarean section and hysterectomy in cases of placenta percreta .

Materials and Method

Placenta percreta is a rare obstetric condition with the risk of massive intraoperative hemorrhage and urologic complications. Previous cesarean deliveries is the most important risk factor . Placenta percreta has an incidence of only 0.008%. Although it is difficult to diagnose placenta accreta antenatally, an accurate diagnosis is one of the most important objectives for the successful management of maternal hemorrhage; this can be achieved using magnetic resonance imaging and ultrasonography.

The use of ureteral stent preoperatively placed by a urologist and bilateral prophylactic occlusion balloon catheters placed in both internal iliac arteries could decrease the incidence of massive hemorrhage and high risk of ureteral injury during cesarean section and hysterectomy.

Results

A 37-year-old woman (gravida 3, para 3) was diagnosed with placenta previa and ultrasonografic findings and magnetic resonance imaging revealed high risk for placenta percreta. Fetal growth was appropriate for gestational age. She had a history of 3 cesarean deliveries.

At 32 weeks of gestation she presented a brief episode of vaginal bleeding. The patient was admitted and fetal lung maturity treatment was carried out.

At 34 weeks of gestation it was decided to end the pregnancy by cesarean section.

Preoperatively a cystoscopy was practised and no bladder invasion by placenta was found. An ureteral stent was placed by a urologist.

Owing to the risk of high blood loss during placentation, bilateral prophylactic occlusion balloon catheters were placed in both internal iliac arteries followed by cesarean section.

Laparotomy revealed large blood vessels and the placenta was observed through the anterior uterine wall. An incison in the uterine wall and through the placenta was performed and a healthy male preterm infant of 2100g and Apgar test 9/10/10 was born . After delivery, as it was impossible to separate the placenta from the uterus , we proceeded to carry out a hysterectomy. The balloons were inflated previously and the bleeding decreased significantly. A total hysterectomy with minimal blood loss was completed.

Hematological data : previous to cesarean hysterectomy: hemoglobin: 12.6 g/dl, hematocrit: 37.9%; platelets: 181.000. After hysterectomy: hemoglobin 9.7 g/dl; hematocrit 29.5%. Two packed red blood cells were transfunded. After transfusion, the results were, hb: 11.1 g/dL; hematocrit: 33 %. platelets: 145.000.

Conclusion

In this case of placenta percreta, a rare obstetric condition with the risk of massive intraoperative hemorrhage, the use of prophylactic occlusion balloon catheters reduced the need for massive transfusion. Placenta percreta is a risk factor for urologic injuries during cesarean hysterectomy. Preoperatively cystoscopy and ureterals stents reduced the risk for urologic complications.

Key words: Placenta percreta, cesarean hysterectomy, ureteral stents, occlusion balloon catheters,
Presenter name: JM Xiberta.

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INTRAPARTUM NURSING CARE IN GESTATIONAL DIABETES MELLITUS

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Introduction

Gestational diabetes mellitus (GDM) poses risks for both the mother and the infant. Mothers with GDM should be provided appropriate care in order that they can have healthy pregnancy, childbirth and postpartum period. This review aims to provide guidance on how to manage intrapartum process of women with GDM.

Materials and Method

Both the mother and the newborn are exposed to some risks. Related to mother the following risks are considered as important: Firstly, decide on the correct birth time and mode of birth. If the mother has GDM, due to the risk of respiratory distress in the neonate, term birth should be recommended, and vaginal birth should be preferred. However, if the baby is macrosomic, this may lead to the development of nerve damage or vaginal lacerations during vaginal birth. In this case, cesarean section is an alternative. Interventions: Mothers should be informed about the importance of term birth, in women with well-controlled GDM vaginal birth should be recommended, mothers should also be informed about advantages and disadvantages of vaginal and caesarean birth if the baby is macrosomic. Secondly, mothers stress during labor, and stress may lead to hyperglycemia and a decrease in fetal perfusion. Therefore, they should be calmed down, informed about the effects of stress on the process, and taught relaxation techniques. Thirdly, develop of hypoglycemia and hyperglycemia. While there is a risk of developing hypoglycemia because of the energy consumed by the mother during labor, there is a risk of developing hyperglycemia if diabetes is poorly controlled. Interventions: Throughout labor, the mother's blood glucose levels should be monitored and she must get enough glucose to meet her increased energy needs. Fourthly, the onset of lactation may be delayed. In GDM, if insulin in the breast needed to start lactation cannot bind enough to insulin receptors, this may delay lactation. In addition, since pancreatic beta cell damage will increase in non-breastfeeding mothers, their risk of developing Type 2 Diabetes Mellitus will increase as well. Interventions: the mother should be encouraged to breastfeed immediately after birth, lactation can be stimulated by pumping, and the effect of breastfeeding on preventing the type 2 diabetes should be explained to the mother.

Results

When the risks of the newborn are evaluated; Firstly, respiratory distress may develop in GDM. Interventions: If possible, birth should be scheduled after 38 weeks of pregnancy, and the birth room should have the equipment ready to interfere with the baby in risky conditions. Secondly, in macrosomic infants, loss of body heat through evaporation is high; thus, they may develop hypothermia. Interventions: the newborn should be thoroughly dried and warmed, and the importance of the maintenance of body heat should be explained to the family. The third one is the dehydration risk. Since the adipose tissue is more in a newborn, the body holds less water, which increases the risk of dehydration. Interventions: The newborn should be frequently breastfeed. Fourthly, the delayed ability of sucking of newborn. Hypoglycemia affects a newborn’s neural behaviors and thus can reduce his/her sucking strength. Interventions: breastfeeding should be started immediately after birth, blood glucose level should be monitored, and if necessary, breast milk should be pumped to feed the newborn with it.

Conclusion

Providing a good care to a mother with GDM during the intrapartum period will improve the mother’s, newborn’s and public’s health

Key words: GDM, inrtapartum care,mother risk, neonatal risk
Presenter name: Merlinda Aluş Tokat

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INCIDENCE AND RISK FACTORS FOR PRIMARY POSTPARTUM HAEMORRHAGE IN BIRTHS IN MIDWIFERY LED SETTINGS IN 'LOW RISK' WOMEN: SECONDARY ANALYSIS OF THE NATIONAL BIRTHPLACE PROSPECTIVE COHORT STUDY.

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Introduction

Postpartum haemorrhage (PPH) is an obstetric emergency. In high-income countries PPH has significant impact on maternal morbidity and rates of PPH are increasing. However, very few studies have examined risk factors and outcomes of PPH in 'low risk' women, particularly those giving birth in midwifery-led settings, where transfer to an obstetric unit (OU) would be required for access to obstetric care. In England, there is a policy of offering healthy women with straightforward pregnancies a choice of birth setting. Midwifery-led, non-obstetric unit (non-OU) settings include home birth, freestanding midwifery units (FMU) and alongside midwifery units (AMU). The study aim was to investigate risk factors for primary postpartum haemorrhage (PPPH) in 'low risk' women who give birth in midwifery led settings.

Materials and Method

We used data from the Birthplace national prospective cohort study. Risk factors for transfer for PPPH (primary outcome) in 'low risk' women who gave birth in non-OU settings were analysed using logistic regression. The risk factors investigated were: active management of 3rd stage of labour, baby weight, body mass index (BMI), ethnicity, parity and planned place of birth. Inverse probability weighting adjusted for different periods of participation of units and robust variance estimation allowed for clustering. The incidence, causes and outcomes of PPPH in this population were described.

Results

After adjustment for maternal characteristics and other risk factors, the following were significantly associated with transfer for PPPH: baby weight≥4kg (adjusted Odds Ratio[aOR] 1.8, 95% confidence intervals(CI) :1.22-2.65), maternal BMI of 25-29.9 vs. BMI 18.5-24.9 (aOR1.43, 95%CI:1.22-2.65), nulliparity (aOR 1.43, 95%CI: 1.11-1.83) and 'Black' (African or Caribbean) ethnicity vs 'White' (aOR 2.36, 95%CI: 1.32-4.21). The incidence of transfer for PPPH was 1.01% in 'low risk' women who gave birth in non-OU settings. Of the 'low risk' women transferred for PPPH, 19.7% required a blood transfusion and 12.7% required admission to higher level care. The primary cause of PPPH requiring a transfusion was uterine atony. The mean volume of blood transfused was 2.8 units.

Conclusion

Nulliparity, baby weight≥4kg, maternal BMI (25-29.9) and 'Black' ethnicity are risk factors for PPPH in 'low risk' women who give birth in midwifery led settings, but the absolute risk of PPPH in this group, particularly of PPPH requiring blood transfusion, is low. This evidence may inform maternity care providers and women when planning place of birth.

Key words: risk factors, postpartum haemorrhage, midwifery led birth settings, 'low risk' women

Presenter name: A. Mummadi

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Labor curve for grand and great-grand multiparous women in a modern obstetric setting

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Introduction

It is important to properly estimate labor progress in grand and great grand multiparous women in order to prevent unnecessary cesarean sections, dangerous augmentations and the risk of post partum hemorrhage due to protraction.

Materials and Method

This is a retrospective observational study based on data from January 2012 until April 2014 that includes women between their sixth and sixteenth delivery in Laniado Hospital Delivery Room, Natanya, Israel.

The study focuses on the active stage of spontaneous labor of singletons at term and in vertex presentation with and without augmentation, with and without epidural analgesia, with and without a previous cesarean.

Only women who were delivered vaginally of a baby with normal Apgar scores were included in the study.

Data were collected from labor room charts.

Statistical analysis was done in collaboration with a statistic laboratory.

Results

Adequate data were obtained for 211 women with a mean age of 35.4 years, para 6 to para 16, at a mean gestational age of 40.12 weeks of which 14% were post cesarean, 61% received epidural analgesia and 11% required oxytocin augmentation. 3.5% of these women had post partum hemorrhage.

1.79% had instrumental vaginal deliveries .

15.6% delivered babies of 4000 grams and more.

No newborn required neonatal intensive care.

A polynomial fitted graph of dilatation against time is presented.

29.1% of these women reached complete dilatation within one hour, 64.3% within two hours and 77.9 % within three hours.

The mean time of first stage was 2.4 hours and of second stage was 18.4 minutes.

Conclusion

The description we shall present reflects the average characteristics of active labor in our population of grand and great-grand multiparous women. However, it should be emphasized that the process corresponding to many such women who deliver a healthy baby by vaginal delivery may have quite a different pattern.

The curve we have obtained is longer than that previously described in grand multiparas and seems to be even longer as party increases beyond 10, without producing a poorer neonatal outcome nor more maternal complications.

Larger numbers and a comparison with our own low parity population are required to reach significance.

Key words: labor curve grand multiparas

Presenter name: Dr. Ariel Polonsky

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METHODS OF CERVICAL RIPENING IN WOMEN WITH PREMATURE RUPTURE OF MEMBRANES AT TERM

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Introduction

Premature rupture of membranes (PROM) occurs in 19-23% of term pregnancies. The outcome of labor in women with term PROM depends on the degree of cervical ripening. There are several complications of labor in women with PROM and unfavorable cervix such as dystocia of labor and fetal distress. The objective of the study is to evaluate the efficacy of different methods of cervical ripening in women with PROM at term.

Materials and Method

We included primigravidae of singleton gestations with PROM at 37 weeks or more, head presentation, unfavorable cervix (Bishop score 4 or less), without any heavy extragenital diseases or obstetric complications.

Of 241 medical records of patients who met the inclusion criteria, 67 women underwent cervical ripening with oral mifepristone (group A), 105 with Foley catheter (group B) and 69 without any method of cervical ripening (control group C).

In group A two hundred milligrams of mifepristone was orally administered. If cervical ripening (Bishop score of > or = 8 or cervical dilatation of > or = 3 cm) did not occur, a single repeat dose of mifepristone was given 6 hours later. In group B the Foley catheter was inserted intracervically. In all groups if active labor did not occur within 12 hours after PROM, intravenous oxytocin was administered.

Results

In Group A, effective cervical dilatation was observed in 60 (89.6%) cases, in Group B it was in 95 (90.5%) cases. Labor began spontaneously within 12 hours after PROM in 48 (71.6%) cases from Group A, in 70 (66.7%) cases from Group B and in 38 (55.1%) cases from control group. Latency period (time from PROM to the onset of labor) was 7.3 ± 1.2 h in Group A, 9.1 ± 2.1 h in Group B and 10.3 ± 1.5 h in Group C ($p<0.05$). In Group A 56 (83.6%) patients delivered vaginally and 11 (16.4%) had cesarean section due to dystocia of labor. In Group B 88 (83.8%) patients delivered vaginally and 17 (16.2%) had cesarean section due to the same surgical indication. In Group C 49 (68.1%) patients delivered vaginally and 20 (31.9%) had cesarean section due to dystocia of labor. The frequency of postpartum purulent-septical complications had no definite difference between the groups and had not exceeded the average population values (2-4%). The majority of newborns in three groups were healthy. No difference in rates of neonatal infection and hypoxic ischemic encephalopathy was present between the groups. Only in Group C newborns had heavy neonatal cerebral injury which required prolonged treatment.

Conclusion

The admissions of oral mifepristone and catheter ripening techniques have similar safety and efficacy. These methods of cervical ripening in women with PROM at term reduce frequency of labor induction, dystocia of labor and cesarean section in 1.5 times, lead to reduction of perinatal morbidity. Transcervical use of the Foley catheter does not increase risk of maternal and fetal purulent-septical complications.

Key words: Premature rupture of membranes at term
Presenter name: Yanina Karabanovich

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COMPUTERISED CARDIOTOCOGRAPHIC (CTG) ANALYSIS IN LABOUR: A CASE FOR USING HISTORICAL COHORT DATA

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Introduction

Computerised systems for CTG interpretation in labour have been previously developed. None is widely adopted in clinical practice yet, but two such systems have been recently tested in randomised clinical trials (pending results).

During the development of these systems, only limited number of historical CTG traces was used. To evaluate the sensitivity of their systems, some researchers used as many CTGs with poor outcomes as possible. But a major problem of CTG monitoring is its high false positive rate. Hence, it is crucial to report the systems' performance on cohort data to allow the calculation of the false positive rate.

We use a large cohort to simulate an early prototype of the Oxford system for computerised intrapartum CTG monitoring (OxSys1.0). This is based on our work with Phase Rectified Signal Averaging, published elsewhere (Georgieva et al, BJOG 128(7), 2014).

Materials and Method

We used a cohort of intrapartum digital CTGs (n=16668), routinely collected in 2000-08 at Oxford. Included were only singletons with validated paired umbilical cord blood gases. Excluded were those delivered without labour (elective Caesareans), babies with breech presentation, with congenital or metabolic disorders, or <36 weeks.

We grouped the labours according to their outcomes:

(1) Birth Asphyxia: intrapartum still birth or arterial pH ApH<7.05 accompanied by seizures or neonatal death, n=14;

(2) Acidemia: all remaining births with ApH<7.05, n=490;

(3) Intermediate: all babies with 7.05≤ApH<7.15 and all remaining seizures or neonatal deaths regardless of ApH, n=2343;

(4) Normal: all remaining babies, n=13821.

We report the Rate of OxSys1.0 Alarms in each group (ROxA). Based on the clinical labour management, we also report the Rate of Interventions for Fetal Distress (RIFD), defined as: Caesareans or vaginal operative deliveries if the primary reason for intervention was stated on the patient notes to be 'fetal distress'. This means the decision for intervention was based on visual assessment of the CTG.

We use the Chi-squared test for differences of proportions.

Results

We compare the ROxA and the RIFD for the four groups:

(1) the ROxA was 50% (7 alarms) and the RIFD was 57.14% (8 babies), p>0.05;

(2) the ROxA was 36.76% (190 alarms), which is slightly better than the RIFD in this group: 30.82% (151 babies), p<0.05;

(3) the ROxA was 27.57% (646 alarms), which is better than the RIFD in this group: 22.02% (516 babies), p0.05.

Conclusion

Using cohort historical data, we show that OxSys1.0 performs as well as the CTG assessment in clinical practice with slightly better sensitivity (rate of alarms in groups 1-3). The false positive rates (alarms or interventions in group 4) are very high in both clinical and OxSys1.0 assessments. Hence future OxSys versions will be developed to improve the sensitivity and false positive rate, before starting prospective clinical testing.

Key words: intrapartum fetal monitoring, computerised CTG, historical cohort data, operative delivery

Presenter name: Antoniya Georgieva

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Conventional and non-conventional analysis of uterine contraction signals in prediction of labour dystocia

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Introduction

The objective of this study was to explore whether conventional and non-conventional analysis of uterine contraction (UC) signals acquired during labour using an external tocodynamometer can be useful in predicting labor dystocia, measured by the occurrence of operative delivery.

Materials and Method

Sixty-one UC recordings were acquired from the same number of women with singleton term pregnancies, during the last two hours of labor. The dataset was divided in cases of normal delivery (n=32), instrumental vaginal delivery (n=23) and caesarean section (n=6). Conventional and non-conventional indices were computed for each 10-min segment in the two hours before labour (H1 and H2). The number of UC per segment (UCN), and the following indices were evaluated: Interval Index (II), High Frequency (HF) and Sample Entropy (SampEn). Statistical inference was performed using 95% nonparametric confidence intervals, Mann-Whitney and Fisher statistical tests, and areas under the receiver operating characteristic curve (auROC).

Results

There was a general increase in UCN, II and HF indices and a decrease in SampEn, from H1 to H2 in the normal and instrumental vaginal delivery group. Significantly higher values of II in H1, UCN in H2 and HF in H2 were seen with instrumental vaginal deliveries compared with normal deliveries, while caesarean sections presented significantly higher SampEn but lower UCN in H2. In the 10-min segment analysis, II and HF provided the best discrimination between normal and instrumental vaginal deliveries in H1 (auROC=0.641) and H2 (auROC=0.734). The best prediction of caesarean section was reached with SampEn in H1 (auROC=0.816) and HF in H2 (auROC=0.844).

Conclusion

Non-conventional indices appear to outperform the conventional quantification of UC in the prediction of instrumental vaginal deliveries and caesarean sections, suggesting that indices such as II, HF and SampEn can be helpful in an earlier diagnosis of dystocia.

Key words: Dystocia; External tocography; Spectral analysis; Entropy.

Presenter name: Mariana Morais

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Caesarean sections in a tertiary care university hospital using an 11-group classification of indications

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Introduction

Rising caesarean section (CS) rates are a major public health concern, due to the negative impact on maternal and neonatal health. The aim of this study was to evaluate CS indications in a tertiary care university hospital, using a nationally approved 11-group classification, divided by the 10 Robson groups of obstetric population characteristics, in order to understand the principal determinants for this procedure and to identify possible areas of improvement.

Materials and Method

Retrospective analysis of all deliveries occurring in the 5 years 2010-2014, using the hospital's ObsCare® electronic patient record database.

Results

The total number of deliveries during the 5 years was 13 395, of which 28.62% were CS. Nulliparous women, with single term cephalic pregnancies in spontaneous labour (Group 1) accounted for 31.1% of all deliveries, and had a CS rate of 18.2%. Arrested labour (AL) was the main indication in this group (64.3%), followed by non-reassuring fetal state (NRFS) (29%). Multiparous women without previous CS, single cephalic pregnancies at term, in spontaneous labour (Group 3) represented 21.61% of all deliveries, and the CS rate in this group was 3.04%. AL accounted for 46.9% and NRFS for 45.9% of these. Nulliparous women with single cephalic pregnancies at term, with labour induction or CS before labour (Group 2) accounted for 16.7% of deliveries, but with a CS rate of 38.1% was the largest contributor for CS (22.1% of all CS). AL was the indication in 41.6% and NRFS in 21.3%. Abnormal fetal presentation (Group 9) represented 0.19% of deliveries, and had a 100% CS rate.

Conclusion

AL was the largest contributor to CS in the three groups with the largest number of deliveries (1, 2 and 3). Group 2 had the highest CS rate and was the largest contributor to overall rates. NRFS was the second leading indication, and in more than half the cases occurred in term nulliparous women (Groups 1 and 2). The integration of an 11-group classification of CS indications with the 10 Robson groups of obstetric population characteristics, helps to identify the main determinants of CS and possible areas of improvement.

Key words: Cesarean Section, Cesarean Classification,

Presenter name: J. Cruz

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Postpartum hysterectomy after eutocic delivery due to placental accretism. A case report.

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Introduction

Placental accretism is an abnormal placental implantation, in which the chorionic villi are directly inserted into the myometrium in absence of basal decidua.

Its incidence has risen 13:1 since 1900 due to the increasing rate of C-sections and other uterine surgeries, the most important risk factors.

The degree of placental invasion defines the type of accretism: placenta accreta if villi are inserted into the myometrium, placenta increta if villi penetrate deep into the myometrium and placenta percreta when it breaks through the myometrium reaching the peritoneum, and even penetrating into the abdominal cavity.

Definitive diagnosis is histological, although ultrasounds are very accurate to detect it in patients with risk factors.

Materials and Method

Although this is a mandatory field, I read in the guidelines that materials and methods were not required for case reports. Please let me know if I'm wrong.

Results

A 29-year-old pregnant woman, no previous uterine surgery, at 39+6 weeks of gestation, was admitted into maternity area due to premature rupture of membranes. After 17 hours of labour, a male baby was born by eutocic delivery. The expulsion of the placenta was spontaneous and both placenta and membranes seemed to be complete.

After birth, bleeding was moderate, so XX units of oxytocin and 0.2 mg of ergometrine were perfused which, along with the uterine massage, achieved a good contraction. 15 minutes later, uterine involution was good.

After 90 minutes the bleeding increased so 0.2 mg of ergometrine IV, 200 µg of rectal misoprostol and 250 µg carboprost IM were administered. There were no constatable placental remainders by ultrasounds, but the bleeding continued so she was transferred to the surgery room (SR) for postpartum curettage.

Four hours later, arterial hypotension and tachycardia appeared. The midwife added colloids, XX units of oxytocin and 250 µg of carboprost. As the patient did not improve she returned to SR for a Bakri balloon insertion, which got her hemodynamic stability.

Fifteen hours later – three after removing the content of the balloon - the bleeding began again. Hemodynamically unstable, responsible doctor did indicate an obstetric hysterectomy due to uncontrolled haemorrhage and hypovolemic shock. Back at ICU she remained stable. After 24 hours she was transferred to inpatient area, where she stayed five more days until she was discharged.

The pathology report stated a puerperal uterus with endomyometrial vascular dilatation and signs of placenta increta. The different histological cuts showed a uterine cavity with deciduochorial remainders along with bleeding changes.

Conclusion

- Placental accretism is a factor to consider when there is a postpartum bleeding, since it is one of the most serious causes of haemorrhage in the immediate postpartum period when the evolution is not adequate.
- This abnormal placental implantation courses frequently unnoticed during the pregnancy, although if any risk factor is present (previous uterine surgery), it is possible to detect it by ultrasound.
- Conservative approach includes pelvic arterial embolization and the use of mechanical methods of compression (Bakri balloon), although hysterectomy is usually needed.
- Definitive diagnosis is histological.

Key words: Placenta, accreta, postpartum, haemorrhage.
Presenter name: Cristina Olivares González.

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Induction of labour with intravaginal dinoprostone device in twin pregnancies

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Introduction

Induction of labour in twin pregnancies is a common obstetric procedure worldwide. It is meant to avoid the increment in perinatal morbidity and mortality that occurs at the end of the pregnancy. We conduct all inductions of labour with the intravaginal dinoprostone device (Propess®). Effectivity and safety information of this procedure for twins is sparse. For these reason, the information that clinicians can offer to patients is limited.

Additionally, induction of labour has been associated with an increase rate of caesarean delivery in single pregnancies, particularly in nulliparous women and those with unfavourable cervical conditions, but these results have not been properly analysed.

This study has the aim of analysing the success rate of the induction of labour in twin pregnancies using the intravaginal dinoprostone device, analysing the final via of delivery and analysing the maternal and fetal complications derived from the process of induction of labour.

Materials and Method

It is a retrospective descriptive study of a cohort of unselected twin pregnancies in which an induction of labour was conducted using the intravaginal dinoprostone device during a period of two years, from January the 1st 2012 to December the 31st 2013 in a tertiary hospital in Spain. These did not include any pregnancy with a breech first twin or previous caesarean section, as these are usual indications for caesarean delivery in our centre. Information regarding patient characteristics, previous history, pregnancy follow-up and final way of delivery was extracted from the clinical records. Induction success was considered when the patient reached a Bishop index greater than 5 with labour uterine contractions, independently of the final via of delivery. Use of oxytocin was not systematic. All deliveries were performed by at least one obstetrician with experience in twin deliveries. To compare frequencies between different categories we used the Chi-Square test, considering a $p < 0,05$ as statistically significant for an 80% statistical power. All relative frequencies and comparison tests were made using SmallSTATA 13 pack for Windows. .

Results

During 2012-2013, a total number of 354 twin deliveries were performed in our centre. Amongst them, there were a total of 83 inductions of labour.

The mean age of the sample was 35 years old (range 22,7-47,9 years). 82,2% were nulliparous. 75,9% were dichorionic diamniotic. 46% of them were spontaneous and 64% were pregnancies obtained using Assisted Reproduction techniques, a third of which via egg donation. The mean gestational age at the time of induction was 37 weeks for the dichorionic pregnancies and 36 for the monochorionic diamniotic. The most common indication for induction was the “term twin pregnancy” (49,4%), followed by the maternal hypertensive disorders (10,8%).

Mean initial Bishop Index was 2,9 (range between 0-5). Mean induction length was 9,57 hours (range between 0,6-34,2 hours). Length of delivery (not considering the length of the induction) was 7,8 hours (range 1-23 hours). After the induction, a 42,2% of patients did not required use of oxytocin.

In this population, there were an 82,7% of successful inductions (68/83), and 15 caesarean deliveries were performed due to failure of induction. From the successful inductions, 80,4% deliveries (54/68) proceed vaginally, whereas a 20,6% were finalised via caesarean section. There were not statistically significant differences in the length of the induction according to maternal age, chorionicity, maternal morbidity or the indication of the induction. We did not find significant differences in the induction success rate depending on parity, and initial Bishop Index was not associated with the success rates, but it was associated with a shorter induction time. Factors more associated with induction success were an age younger than 36 years old ($p=0,0435$), the monochorionic diamniotic type ($p= 0,0135$) and the spontaneous conception ($p= 0,01$).

Fetal wellbeing perinatal parameters (umbilical artery pH, Apgar scores, need for assisted ventilation or admission in the Neonatal Intensive Care Unit) were not significantly different between vaginal and caesarean deliveries.

There were not allergic reactions to the intravaginal dinoprostone device, there was 1/83 case of gastrointestinal adverse effects (vomits), and in terms of hyperesponse to dinoprostona, there was 1/83 case of tachysystole and 1/83 case of uterine hypertonia, both with an spontaneous resolution after extraction of the device and which did not required further obstetric procedures. We did not found any case of uterine rupture in our population.

The most common puerperal complication was the anaemia, present in 29,6% of patients, and there were 10/83 cases of obstetric haemorrhage.

Conclusion

In conclusion, the intravaginal dinoprostone device was an effective and safe induction method in our population, providing an 82,7% success rate and achieving a total of65,6% of vaginal delivery rate after induction. The factors more associated with induction success were maternal age younger than 36 years old, monochorionicity and spontaneous conception, whereas factors such as parity or initial Bishop Index did not affect the success rate but were associated with a shorter time of induction.

Key words: twin pregnancy; induction of labour; dinoprostone; twin delivery; perinatal results

Presenter name: Laura Pérez Martín

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ACUTE UTERINE INVERSION IN VAGINAL DELIVERY

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Introduction

Acute uterine inversion is extremely rare complication of vaginal delivery with incidence in 1:30000 deliveries, and due to the hemorrhagic shock with disseminated intravascular coagulopahy (DIC) the maternal mortality rate even today is 15%. There are many factors that could lead to acute uterine inversion in vaginal delivery but adherent placenta is commonest cause.

Materials and Method

To present a rare case of acute placental inversion in vaginal delivery in low risk pregnant woman due to the partially adherent placenta.

Results

Our case was 23 years old primiparous woman in 39th week which came to our delivery ward in active labor. Two month before this pregnancy she had a missed abortion in 11th week which was terminated with D&C. Her pregnancy was unremarkable, and the placenta was located on anterior uterine wall without sonographics signs of adherent placenta. First and second stages of labor were unremarkable and healthy female newborn was born. Third stage of labor was actively managed, 35 minutes from delivery all clinical signs of placental detachment were present and half of the placenta was located outside vaginal introitus. The placenta was tried to deliver by cord traction, but even with minimal traction the uterus was inverted. Furthermore, in deep IV anesthesia we detached the remaining placenta, and performed Johnson´s maneuver for uterine reposition. Large volume of crystalloid as well as colloid infusions together with 50 IU of oxytocin and 3 doses of prostaglandins were applied. Due to the continuous vaginal bleeding 6 doses of erythrocyte concentrate and 6 doses of FFP were applied with IV antibiotics. The position of the uterus were sonograplically checked few times and uterus was located in normal position, but vaginal bleeding continued with clinical and laboratory signs of DIC. Six hours after the reposition we opted for surgical treatment. On laparotomy we found uterus in normal position but uterine fundus was partially inverted (Picture 1). We opted for hysterectomy and uterus together with placenta was send to patohystologic analysis. During the surgical procedure she additionally got 5 mg of recombinant human coagulation factor VIIa, 2 doses of tranexamic acid, and 2 doses of cryoprecipitate with additional blood and fluids. The bleeding was successfully stopped and she was completely recovered and discharged from hospital 7 days after delivery. The pathologic finding showed us that placenta was consisted of two pieces (placenta bilobata), one part was firmly attached to the uterine wall (the uterine wall was thick only 1 cm on the part were one placental lobe was adherent in comparison of 3 cm in remaining uterine wall) and umbilical insertion was located paracentrally on the other placental lobe

Conclusion

The etiologic cause of that pathologic finding could be short interval between uterine curettage and subsequent pregnancy with unusual placental form which was only partially adherent to the anterior uterine wall.

Key words: placental inversion, vaginal delivery, Johnsons maneuver, hysterectomy
Presenter name: Ozren Grgic

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DIFFERENT TYPES OF EPIDURAL ANALGESIA AND RELATION TO DELIVERY

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Introduction

Consequence of continuous or intermittent epidural analgesia on duration of labor, cesaerean section or fundal pressure maneuver rate and dose of anesthetics applied during labor.

Materials and Method

Totally, 101 parturients were prospectively randomized to get intermittent (n =51) or continuous (n = 50) type of epidural analgesia in labor. The outcomes were: length of labor from submission of analgesia, dose of anesthetics and rates of cesaerean section or fundal pressure maneuver among the two groups.

Results

Length of labor from analgesia to delivery was not significantly different among the groups (395 + 75 vs. 404 + 68 min, p = 0.33, Mann Whitney test). Dose of opioid anesthetic (2 [1.5 – 4] vs. 5 [3.5-7.5] ml, p < 0.001 as well as non opioid anesthetic 2.0 [1.0-7.5] vs. 5.5 [3 – 9] ml, p < 0.001, Wilcoxon test), rate of cesaerean section (5/50 vs. 9/51 vs., p = 0.02 and fundal pressure maneuver (5/51 vs. 12/50, p = 0.03, Fisher exact test) were significantly higher in continuous group.

Conclusion

Intermittent epidural analgesia is associated with lower dose of anesthetic and decreased rate of cesaerean section and fundal pressure maneuver without influence on duration of labor in comparison with continuous type of epidural analgesia.

Key words: epidural analgesia, intermitemt, continous, duration of labor, dose of anesthetics, cesarean section, fundal pressure

Presenter name: Ozren Grgic

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Sensation Level of Maternal During Delivery and Affecting Factors : An Example Form Turkey

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Introduction

Notable changes are observed in terms of the experiences women all around the world go through during labour. Factors such as the place that delivery takes place, common usage of technology during delivery, increase in the rates of caesarean labour, intervention taking place during delivery etc,. effect emotions and the care given to maternal during the labour. As being a country where traditional and contemporary structures are experienced as complex and also the speed of fertility being 2.2 Turkey is important for the countries with the same structures as an example of depicting the mood of women and the effecting factors during delivery.

Aim: The aim of this research is to define the sensation of maternals and the effecting factors during delivery.

Materials and Method

Design: The research is cross-sectional and analytical. Composed of 24 questions ``Maternal Introduction Form`` and The Labour Agentry Scale prepared by the researchers have been used. The Labour Agentry Scale was developed by Hodnett and Simmons-Tropea (1987) to investigate women's emotions during labour (the feeling of control and satisfaction). The scale was adapted into Turkish by Gencalp (1998), and the Turkish version is a five-point Likert scale composed of 28 items. Evaluation is done with point average of each individuals taken from scale. Maternals with high points are considered to had labour positively. In this scale cronbach alpha level has been determined as 0,791.

Setting: a Education And Research University Hospital in Izmir, Turkey. Participants: 187 women in the early postpartum period, selected with a non-probability method and those volunteer to participate to th research.

Ethics: For the research after having taken the consent of Independent Ethics Institution Number 2 (Izmir), a written consent of the management of the hospital where the data is gathered and consent of maternals participating to the research has been received.

Analysis: Research data has been analyzed by using SPSS statistic program. Number and percentage distribution have been taken, one way analysis of variance, data comparison with t test in independent group and correlation has been carried out.

Results

Age average of maternals is 28.41±5.72 and 73.8% of them are literate or graduated from primary school. 59.4% of maternals have given delivery with caesarean method. The Labour Agentry Scale point average has been determined as 94,78±14.56. No statistically significant difference was found The Lobur Agentry Scale scores with maternals willingness of pregnancy (p=0.75), prenatal eduaction status (p=0.709) neonatal sex (p=0.868) and the way of labour (p=0.314). However the point average of maternals with vaginal delivery has been found higher than those of other ways. In correlation analysis no relation between scale point average and maternals age (p=0,869), number of labour (p=0.686) and labour duration (p=,094) has been found. However it has been found that there is a negative relationship between labour duration and emotion level.

Conclusion

The results of this study showed that, the Labour agentry scale point average was moderate. Although in the early postpartum period the labour agenty point average of maternals is not effected by the labour way and duration statistically it has been found that it is effected in terms of point averages.

Key words: Labour Agentry, labour way, labour number

Presenter name: Hafize Ozturk CAN

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PREVALENCE OF IATROGENIC DELIVERIES BEFORE 39 WEEKS GESTATION IN PORTUGAL

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Introduction

Late preterm birth (birth between 34 and 36 complete weeks' gestation) and early term birth (birth between 37 and 38 complete weeks' gestation) have become a topic of recent discussion as the morbidity associated with delivery at these gestational ages has become increasingly evident. We intended to evaluate the prevalence of iatrogenic deliveries at these gestational ages in Portugal.

Materials and Method

We developed a survey questionnaire that was sent to the Obstetric Department of all public hospitals in Portugal. The questionnaire included questions on prevalence, indications of iatrogenic labor and route of delivery of late preterm and early term deliveries. The questions referred solely to single births occurred during 2013.

Results

We received completed questionnaires from 14 hospitals, corresponding to nearly one third (33.5%) of total deliveries in Portugal. We report 5.4% of late preterm and 27% of early term deliveries. Approximately two thirds of late preterm and three quarters of early term deliveries were spontaneous. The most common indication for iatrogenic delivery in both gestational age groups were premature rupture of membranes (15% in the late preterm and 6.7% in the early term group), followed by maternal hypertensive complications between 34 and 36 weeks (8%) and 'no indication registered' (5.6%) in 37 and 38 weeks' gestation. The cesarean section rate was considerably higher in late preterm (39.1%) than in early term (26.4%) births.

Conclusion

Considering the iatrogenic deliveries before 39 weeks' gestation, although there are some indications that are well established, there still remain some less well-defined indications, and perhaps these unclear indicatons are the ones that could be reduced, avoiding unintended maternal and neonatal complications.

Key words: iatrogenic labor, late preterm, early term

Presenter name: J Barros

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Gestacional diabetes: maternal, fetal and neonatal outcomes

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Introduction

In the last few years, improvements have been made in the screening and treatment of Gestational Diabetes (GD). Nevertheless, maternal, fetal and neonatal outcomes in pregnancies complicated by GD have not yet reached those of low-risk pregnancies. The main purpose of this study was to characterize a population of pregnant women with GD with respect to demographic factors, medical history, obstetric, fetal and neonatal outcomes and compare them with those of a population of pregnant women with low-risk pregnancies.

Materials and Method

We conducted an observational, analytic and retrospective study, based on consultation of clinical data from 201 women diagnosed with GD in 2013, with follow-up of pregnancy and childbirth in our hospital and 201 women with low-risk pregnancies who have had third trimester assessment and delivery at the same institution. Data analysis was done using SPSS 22.0 software (SPSS, Inc.®). Significance was considered for $p<.05$.

Results

Pregnant women with GD were found to be significantly older than low-risk group (mean age of 32,4 years vs 30,9 years, $p<.001$) and have gestacional hypertension more frequently (6% vs 2%, $p<.05$). In the GD group we found significantly higher caesarean section (40.3% vs 24.4%, $p<.05$) and instrumental delivery rates (17,9% vs 24.4%, $p<.05$). Cephalo-pelvic disproportion was the main cause for caesarean section in GD pregnancies (32,1% vs 16,3% in the control group). Regarding neonatal outcomes, there were no differences between both groups concerning low fetal birth weight and macrossomy. Newborns of pregnant women with GD had more shoulder dystocia ($n=6$ vs $n=0$, $p<.05$) and neonatal morbidity ($p<.001$), mainly because of hypoglycemia (44 cases), and were more frequently admitted to Neonatology Department ($p<.05$).

Conclusion

In our study, we found that women with GD were older, had a higher gestacional hypertension incidence, higher caesarean section rates and neonatal department admissions. Nevertheless, the incidence of major complications was low and metabolic control of GD was satisfactory since there was no impact of gestacional diabetes on fetal birth weight.

Key words: Gestational Diabetes, Insulin, Obstetric Outcomes, Neonatal Outcomes

Presenter name: Alexandra Miranda

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Nurse midwives in Portugal: identifying fragile areas in the empowerment perception

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Introduction

Nurse Midwives (NM) are independent and qualified professionals who provide special care to women and their families in sexual and reproductive health area (ICM, 2010). However, in some contexts occur constraints that prevent the development of their autonomous practice and, thus, prevent the development of empowerment (Henriques, 2012). Although the concept of empowerment is difficult to define, the NM empower women through sustained practice in values and education for health and, simultaneously, develop their empowerment (Hermansson & Martensson, 2011).

Objective: To identify the areas of greatest weakness in perception of empowerment NM.

Materials and Method

Correlational study, a quantitative approach. Convenience sample with 139 NM, mostly female, mean age = 39.6 years and 30.2% to ≤10 years of professional activity. The study was released by email and data collection conducted through an online platform for 3 months.

Was used a questionnaire with socio-professional data and the "Perceptions of Empowerment in midwifery Scale" (Matthews, Scott, y Gallagher, 2009) adapted by Henriques (2012) with 17 items distributed in 5 dimensions. The scale application to the sample resulted, after factor analysis with Varimax rotation and equivalue≥1, in eliminating 5 items and remaining 12 spread across 4 dimensions explaining 68.9% of the total variance of the responses: "Management"- 4 items, α=0.847; "Professional Recognition"- 3 items, α=0.814; "Autonomous Practice"- 3 items, α=0.603; "Communication"- 2 items, α=0.551. For the total scale we obtained a standardized α=0.814, higher than α scale adapted (0.811) showing a good level of internal consistency of the instrument. We Observed KMO=0.792 and Barlett's Test=p<0.001, providing better rates than the modified scale (KMO=0.719; p≤0,001). Statistical analysis with SPSS 20, using descriptive statistics, factor analysis with Varimax rotation.

Results

Whereas the instrument contains a Likert scale type where 1 corresponds to "strongly agree" and 5 "strongly disagree" and analyzing that the lower is the total score of the size, the greater the perception of empowerment, we obtained the following results:

- The mean scores obtained in the "Management" dimension was 2.6 and the dimension "Communication" 2.8, which corresponds to a negative perception.
- The average of the scores obtained in the dimension "Professional Recognition" was 2.2 and in "Autonomous Practice" 1.6, what we consider as a positive perception.
- In short, the perceptions of more positive empowerment are related to the control of Professional Practice and Recognition

Conclusion

Considering the 4 dimensions identified in the study by applying the scale validated by Henriques (2012), we emphasize that the most fragile areas for the development of the empowerment perceived by NM, relates to the management, in particular as regards to not feel valued (α= 2.6) and not feel supported by their superior (α= 2.76); Communication is related, specifically, to the perception of lack of information about the changes that occur in the organization that affect their practice (α= 2.87).

These results suggest an improvement in the quality of management structures and communication in organizations where the NM works, as well as, the need for more research on the impact of management and communication, in the perception of NM empowerment.

Key words: Nurse midwives; Empowerment; Perception

Presenter name: D. Sardo

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Maternal obesity and induction of labour

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Introduction

Obesity is an emerging problem in developed countries, affecting more than 50% of pregnant women in the USA. In these women, the literature reports increasing incidence of both induction and failure of induction.

Aim of this study was to assess the incidence of induced labour and the response to induction in obese women, in a setting of a large hospital of a Northern Italian region.

Materials and Method

In this retrospective study we recruited 1076 consecutive women who delivered in 2012 in the Obstetrics Department of the University of Turin at 37-42 weeks of GA, excluding multiple pregnancies and elective caesarean sections. Of these women, 706 had a normal BMI (BMI <30 kg/m2; control group) and 370 were obese (BMI ≥30 kg/m2; case group). Among the case group, 311 women had BMI ≥30 <40 kg/m2 (light/moderate obesity) and 59 had BMI ≥40 kg/m2 (severe obesity). Obese women and controls were comparable for parity and age. Induction was conducted according to our local protocol. P-value was used for statistical tests.

Results

1) The incidence of caesarean section was significantly higher (p <0.001) in women with light/moderate obesity (21.9%) and with severe obesity (30.5%) than in controls (10.1%). In particular, in obese women the incidence of caesarean section for first stage arrest was higher. The incidence of vaginal assisted delivery with vacuum didn't differ among the study groups.

2) The incidence of induced labour significantly increased (p <0.001) from 14.8% in normal women to 32.2% in women with light/moderate obesity to 62% in women with severe obesity.

3) The induction failure incidence was higher in women with light/moderate obesity (30%) and with severe obesity (35.1%) than in normal women (24.8%), but this trend was not statistically significant.

Conclusion

Induction incidence increased with increasing BMI, probably because of the increase in post-term pregnancies and in pregnancy complications (hypertension, diabetes...).

Our findings indicate that obesity is likely to affect myometrial activity prolonging the first stage of labour, which in turn affects the rate of caesarean sections. Prevention and control of maternal obesity before and during pregnancy could avoid pregnancy and labour complications.

Key words: maternal obesity, induction of labour

Presenter name: L. Caramellino

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Homebirth versus Birth in Hospital

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Introduction

In Slovakia, the delivery of babies takes place in a hospital. In this study we focused on the opinions of pregnant women and midwives on homebirth and birth in a hospital in Slovakia.

Materials and Method

69 midwives and 80 pregnant women participated in this study. As a measuring instrument were used two special prepared questionnaires which focused on detecting categorical items and items based on the opinions of midwives and pregnant women on homebirth and birth in a hospital. In order to evaluate the responses in both questionnaires, we used a Likert scale.

Results

Based on the analysis of data collected during the survey, we found out that 67% midwives are not willing to supervise homebirth and 66% pregnant women do not think they would decide to give birth at home. From file (n=69) follows that 36% midwives feel inadequately trained to manage homebirth and 38% midwives say they are not adequately trained. 50% pregnant women and 81% midwives consider homebirth as a high risk. The delivery of the babies in a hospital compared to homebirths is safer for 78% midwives and 48% pregnant women. 47% pregnant women mentioned that they do not agree with homebirth attended by a midwife. Another interesting result was the preference of 65% pregnant women to choose a medical doctor instead of a midwife during the physiological labour in a hospital.

Conclusion

By a comparison of the study results we can conclude that despite of the women´s right to make a free decision on where and under which circumstances they give a birth as well as the international definition of a midwife; neither midwives nor pregnant women expressed their interest in homebirth. Thus it is necessary to support and reinforce the professional role of midwife in Slovakia.

Key words: midwife, physiological labour, homebirth, birth in a hospital, pregnant women

Presenter name: S. Kelcikova

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Biophysical and biochemical fetal cardiovascular profile in pregnancy compicated by insulin-treated diabetes

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Introduction

Aim of this study was to evaluate the impact of diabetes on fetal cardiac function. We tested the hypothesis that fetuses showing cardiac abnormalities in utero may have an altered ability of the myocardium to respond to the stress of labour.

Materials and Method

In this cohort study, approved by ethics committee and held at the Obstetrics Department of the University of Turin, patients were selected prospectively between November 2012 and July 2014, after giving an informed consent.

We recruited women with pre-gestational diabetes or insulin-treated gestational diabetes (≥20 units per day). Glycemic control was assessed by glycated hemoglobin value and considered satisfactory if ≤6.5%. As measures of fetal cardiac function we used pulsatility index of the ductus venosus (PI-DV), thickness of the inter-ventricular (IV) septum and venous cord blood Brain Natriuretic Peptide (BNP) value. Measurements of PI-DV and fetal IV septal thickness were performed at 33-35 weeks of GA through an ultrasound examination. Values above the 95th centile of the reference range for GA in uncomplicated pregnancies [PI-DV>1 and a fetal IV septum ≥4.51 mm] were considered abnormal. BNP levels were assayed by commercially available radio-immunoassay. Fetal monitoring during labour was performed by CTG and STAN.

Results

We analyzed the cardiac function of 50 fetuses.

In the analyzed sample there wasn't a statistically significant correlation between PI-DV, maternal glycemic control (p=0,65) and abnormal CTG in labour (p=0,31).

Forty-one fetuses (87% of the analyzed sample) had an increased thickness of the IV septum [6,1 (4,1-8,5) mm] not related to maternal glycemic control. Septal hypertrophy was still detectable in 27% of newborns 3 days after birth, but it returned to normal in all cases one month after delivery.

BNP values were higher among fetuses with septal hypertrophy (20 pg/mL vs 10pg/mL[p=0,12]) and abnormal heart beat in labour (78.9 pg/mL vs 20.7 pg/mL[p=0,14]).

Abnormal heartbeat in labour was found in 20% of cases. CTG alterations were observed in 18% of fetuses with a thicker IV septum vs 20% of fetuses with normal septum(p=1,00) and in 23% of fetuses of mothers with poor glycemic control vs 23% of fetuses of mothers with good glycemic control (p=1,00).

STAN evaluation was possible in 32% of the cases and ST changes were observed in 2 cases out of 16 (episodic T/QRS baseline rises in intermediate CTG). No ST depression were observed.

Conclusion

Cardiac hypertrophy was present in almost all cases, but it was transient and most probably related to a condition of metabolic disorders due to maternal disease.

A maternal poor glycemic control and a thicker fetal IV septum did not increase the risk of abnormal fetal heartbeat in labour. Fetal ST analysis showed no significant alterations of the tracings. Probably the close maternal-fetal monitoring and the proper timing of delivery improved fetal myocardium ability to respond to the stress of labour.

Key words: fetal monitoring, STAN, diabetes, cardiac function

Presenter name: C. Melluzza

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The effects of Analgesia and Anaesthesia on Delivery Outcomes; Experience from Malta

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Introduction

Different modalities of analgesia and anaesthesia during labour have been associated with altered maternal and foetal outcomes. Whilst international obstetric anaesthesia guidelines recommend spinal over general anaesthesia (GA) in Caeseraen section (CS), conflicting evidence exists. We studied the effects of anaesthesia on mother and foetus, as well as the effects of analgesia on failed vaginal deliveries.

Materials and Method

Data for this retrospective study was obtained from the Maltese National Obstetrics Information System. All deliveries during 2012 were included.

Results

4258 deliveries were carried out in 2012. 65.0% (n=2767) were vaginal, whereas 35.0% (n=1491) underwent CS. 46.5% of CS (n=693) were elective, whilst 53.5% of CS (n=798) were emergency procedures.

70.2% of failed vaginal deliveries requiring emergency CS had been given regional analgesia, compared to only 43.4% of successful vaginal deliveries (p=0). Conversely, literature shows no significant difference in conversion to emergency CS between patients on epidural and those on opiates. Regional analgesia was also a significant (p=0) risk factor for instrumental assistance (13.1%) when compared to non-regional techniques (6.0%).

Foetal Apgar scores at 1 and 5 minutes were not significantly related to use of spinal or GA in elective CS. Whereas literature shows slightly better Apgars with spinal, or none at all1, our data suggested better Apgars with GA, at both 1 (GA=9.34; spinal=8.86; p=0.24) and 5 minutes (GA=10.07; spinal=9.12; p=0.35) but this was not significant in either case. Maternal and neonatal days until discharge were used as markers of outcome. Despite neither reaching significance (p=0.27, 0.22), both means were shorter with spinal (spinal=4.0days, 4.1days; GA=5.1days, 5.5days).

Conclusion

Epidural analgesia is a risk factor for instrumental delivery. This has been previously attributed to slower labour progression and higher risk of dystocia. Epidural is also a risk factor for emergency CS. Both spinal and GA can be used safely in elective CS with slight differences in Apgars not being statistically significant. Despite differences in days until discharge between spinal and GA also not reaching significance, this has also been described in the past1, and merits further research.

Key words: General Anaesthesia; Spinal; Regional

Presenter name: Jessica Borg

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NATIONAL GUIDELINES ON CTG INTERPRETATION: ARE THEY REALLY EFFECTIVE?

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Introduction

The aim of this study was to assess the background knowledge of NICE Guidelines amongst obstetricians and midwives in the UK, and to determine the effect of intense fetal physiology-based CTG Training.

Materials and Method

Pre and Post Test results of delegates who attended CTG Masterclasses in 15 Centres in the United Kingdom between January 2013 and September 2014 were analysed. A total of 810 midwives and obstetricians underwent CTG Masterclasses and took a Pre Test (prior to the commencement of training) and a Post Test (at the end of training) comprised of exactly the same questions on NICE guidelines. Independent categorical variables were compared using the Chi-square test and the Bonferroni correction was applied for multiple comparisons. The change in the proportion of correct answers was calculated using the McNemar's test for paired data. A two-tailed p value of < 0.05 was considered statistically significant.

Results

Only 48.5% of midwives and 46.9% of obstetricians correctly answered the questions regarding knowledge of NICE guidelines during the Pre Test. After the CTG Masterclass, the percentage of correct answers increased to 84.9% among midwives and 95.1% among obstetricians (being statistically significant in both groups, $p<0.0001$). This represented a 38.2% and 49.2% increase in knowledge with regards to NICE Guidelines amongst midwives and obstetricians, respectively.

Conclusion

Although NICE Guidelines were introduced into clinical practice in September 2007, less than 50% of the clinicians got the answers correct during the Pre Test. This appears to indicate that guidelines that are based purely on pattern recognition are not effective as less than half the number of midwives and obstetricians actually remember them, even after 7 years of publication. However, the use of an intensive fetal physiology based training appears to improve knowledge of national guidelines. This is most likely due to understanding the clinical context and features of fetal response to hypoxic or mechanical stress on the CTG trace. Therefore, we strongly recommend the use of fetal-physiology based CTG Training to improve and optimise the use of NICE Guidelines.

Key words: NICE guidelines, fetal physiology, CTG training

Presenter name: ANNA GRACIA PEREZ-BONFILS

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IMPACT OF PHYSIOLOGY-BASED "PREDICTIVE" CTG TRAINING ON KNOWLEDGE AND DECISION MAKING AMONGST MIDWIVES AND OBSTETRICIANS

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Introduction

Physiology-based predictive CTG Interpretation involves use of fetal physiology to understand features observed on the CTG Trace and the use of fetal response to hypoxic stress to predict the next change on the CTG Trace so as to improve perinatal outcomes. The aim of this study was to determine the impact of physiology-based predictive CTG Training on knowledge and decision making amongst midwives and obstetricians.

Materials and Method

Pre and Post Test results of delegates who attended CTG Masterclasses in 15 Centres in the United Kingdom between January 2013 and September 2014 were analysed. A total group of 810 midwives and obstetricians in 15 centers in the UK attended CTG Masterclasses. Pre test (prior to the commencement of training) and Post Test (at the end of training) comprised exactly the same questions about understanding of fetal pathophysiology and decision making based on features suggestive of various types of intrapartum hypoxia on the CTG. Questions were categorised into 'Knowledge of pathophysiology', 'Decision Making' and 'NICE guidelines' and were analysed. Independent categorical variables were compared using the Chi-square test and the Bonferroni correction was applied for multiple comparisons. The change in the proportion of correct answers was calculated using the McNemar's test for paired data. A two-tailed p value of < 0.05 was considered statistically significant.

Results

Only 25.1% of midwives and 30.1% of obstetricians correctly answered the questions that tested their knowledge of pathophysiology of intrapartum hypoxia during the Pre Test. After intensive training, the proportion of right answers increased to 91.1% among midwives and 90.6% among obstetricians. Therefore, the proportion of improvement was 68.2% among midwives and 60.6% among obstetricians. Only 48.4% of midwives and 56.0% of obstetricians answered questions on Decision Making correctly during the Pre Test. After the intensive physiology-based CTG Training, this increased to 94.1% amongst midwives and 97.9% of amongst obstericians, respectively. The percentage of improvement was 43.9% and 37.9%, amongst midwives and obstetricians, respectively.

Conclusion

Intensive fetal physiology based CTG Testing not only appears to improve knowledge of types of intrapartum hypoxia and fetal response to hypoxic or mechanical stress during labour, it also promotes appropriate decision making in the presence of acute hypoxia in labour and the appropriateness of additional tests of fetal wellbeing.

Key words: Fetal physiology training, CTG test, intrapartum hypoxia

Presenter name: ANNA GRACIA PEREZ-BONFILS

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Natal Hypnotherapy Increasing Normality in Childbirth

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Introduction

Hypnotherapy is a non-pharmacological and psychological intervention that uses hypnosis, an altered state of consciousness. There is promising evidence that hypnosis may be effective in reducing acute pain across a range of setting and long-term condition (Catherine Fredette et al., 2013)
Hypnotherapy for childbirth is a useful tool which can help to reduce a woman's anxiety, fear, muscular tension and also enhance her mood, increase her confidence and control in her birthing process and empower her emotional preparation for birth.
The use of hypnotherapy can have also enable a cost-effect service, in fact the use of hypnotherapy during childbirth appears to lead to decreased Cesarean Section rates and reduce the use of pharmacological analgesia and the length of labour as shown in our review.

Materials and Method

- Retrospective review of patient satisfaction
- Surveys completed by women who attended the Hypnotherapy course in 2013.
- The data collection was February 2013- January 2014
- The local presentation of the results was in November 2014

Results

The review identified that the majority of the women who attended the Natal Hypnotherapy course were first time mothers (primigravidas) (84%).
The labour duration was on average 7.7 hours compared with the average from 8 to 18 hours recommended by National Institute of Clinical Excellence Guidelines (NICE, 2014).
38% of the women used non-pharmacological pain relief. Of these, 87% used the self-hypnosis and natal hypnotherapy that they had been taught in the classes.
The remaining 62% of women used pharmacological pain relief during labour. With 61% of the women using only Entonox, 32% electing for an Epidural Anesthesia and 7% for Opiods injections.
This highlighted that there was a reduction of use of pharmacological pain relief when Natal Hypnotherapy was used. Our average Epidural rate is 41%.
Regarding delivery type, 79% of the women who used Natal Hypnotherapy had a spontaneous vaginal delivery and 18% of the women had ?Cesarean Section compared with our monthly average rates that is 20-30.6%.
Only 1 term baby (3%) needed admission to Neonatal Intensive Care Unit compare to our monthly average of 21 term babies.
The review also found that women using Natal Hypnotherapy had a higher rate of breastfeeding their babies (71%) compared to women who did not use Natal Hypnotherapy (57%).

Conclusion

The results suggested :
- reduction of Cesarean Section rates
- reduce pharmacological used of pain relief in labour
- reduced duration of labour
- reduction of unanticipated admission of term babies to Neonatal Intensive Care Unit
- Increased rate of breastfeeding initiation

Key words: Natal Hypnotherapy/ increased normality birth
Presenter name: E.Mazzocchi, K.Lee

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Imitators of Preeclampsia

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Introduction

Hemolytic-uremic syndrome (HUS) is characterized by hemolytic anemia, acute kidney failure (uremia) and a low platelet count (thrombocytopenia).
Most cases emerge after an infection disease (like Shiga-like toxin-producing E. coli), but rarely the syndrome can be linked to genetic defects.

Materials and Method

We collect the data from a patient who was admitted in the obstetric emergency room of Hospital Pedro Hispano

Results

A 35 year old primipera with 35 weeks of gestation came to the hospital due to abdominal pain.
During the observation it was diagnosed a hypertensive crises (blood pressure: 177/113mmHg) with proteinuria and fetal death. She was admitted with the diagnosis of pre-eclampsia.
Labor induction was started, but due to the rapid and serious clinical deterioration (TA: 190/103mmHG visual changes, headache, anemia, thrombocytopenia) it was decided to perform an emergency cesarean.
After birth, the patient was admitted in the intensive care unit (ICU) and the deterioration of renal function with little change in the hepatic enzymes raised the suspicion of a hemolytic-uremic syndrome.
During the first 5 days she suffered a clinical exasperation (major due to renal dysfunction) with need to renal replacement therapy and plasmoferesis.
She has discharges at 23th day of hospitalization asymptomatic and recovering from the renal failure.
In the follow up appointment, the genetic study confirmed the diagnoses of HUS and the patients were counseled not to get pregnant again.

Conclusion

In conclusion the differential diagnosis between the hypertensive syndromes in the pregnant women is not always simple.

Key words: Hemolytic-uremic syndrome; Pre-eclamsia; Hypertensive syndromes
Presenter name: J. Félix

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BIRTH PLANS: EMPOWERING WOMEN's CHOICES

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Introduction

Giving birth has been transformed from a social event which was shared by the community to one in which the medical professionals have control, leading to progressively greater levels of intervention and the reduction of the woman's role.

The participation of women in the decision making process constitutes the first step in the principle of autonomy.

The process of shared decision making implies the active participation of the women, where unbiased information is shared, women's preferences are evaluated, and a birth plan is agreed.

The purpose of the birth plan is to describe personal expectations about childbirth, encourage communication with healthcare professionals, and share in decision making.

The aim of this review is to identify the elements a birth plan should include, and the effects they have on women and care providers.

Materials and Method

Literature review from Pubmed, The Cochrane Library, and National Clinical Practice Guidelines for Pregnancy and Labor.

Results

The most important elements of a birth plan identified included pain management, comfort measures, postpartum preferences, atmosphere, and birthing beliefs.

Research exploring the value of birth plans has shown conflicting findings. It seems they improve women's birth experience, satisfaction, and perception of control during the process of labor. But women may be disappointed or dissatisfied if a birth plan cannot be implemented. Care givers often felt irritated or in tension caused by conflicting beliefs about birth and power balance between women and them and by rigid hospital policies.

Conclusion

The written birth plan is an important tool to help women achieve their personal goals and have the birth they want. Health professionals should encourage women to be the protagonist throughout the process and empower her capacity for resistance to facilitate the physiological progess and her decision making.

Key words: Birth plan, women, decision making.

Presenter name: M. Rey

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Progression of labour in induced multiparous women

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Introduction

It is known that inducing labour in nulliparous women increases the likelihood of an operative or instrumental delivery. In multiparous women however, whilst studies show that the rate of instrumental delivery is higher, the caesarean rates are similar whether the woman is induced or not. Our aim was to determine whether in fact induction of labour in multiparous women results in an increase in operative or instrumental deliveries, and what the impact is on neonatal morbidity and mortality.

Materials and Method

Our study is a retrospective cohort study of pregnant multiparous women (≤2 births) at term (≥37+0 weeks of gestation) with single vertex presentation who were admitted to the delivery suite of the Hospital Garcia de Orta between January and July 2013. Data was extracted from electronic medical records. All women included had to be in active labour (≥3cm but <6cm dilatation with regular contractility) and all were given loco-regional analgesia. Neonatal morbidity was assessed by analysis of Apgar score on the 1st and 5th minutes and neonatology ward admission.

Results

We obtained a sample of 204 women, of which 33% (n=66) had induction of labor with prostaglandins (Group I), judged to be elective by chart analysis. Mean maternal age of women in Group I was 30,82 years (±5,23), mean gestational age 38,89 weeks (±1,59) and mean neonate weight 3258 grams (±497). Women who went into spontaneous labour (Group II) had a mean maternal age of 31,24 years (±5,66), mean gestational age of 38,99 weeks (±1,26) and a mean neonate weight of 3353 grams (±507). The logistic regression bivariate analysis model allows us to predict that multiparous women who are submitted to induction of labour will more often have an instrumental or operative delivery (33,8% vs 17,9%, p=0,014). Within the population that was studied, Group I had a 18,4% rate of instrumental delivery and a 15,4% rate of caesarean section (versus 10,4% and 7,5% respectively in the spontaneous labour group). Apgar scores at 1 and 5 minutes were similar in both groups (1 minute Apgar: 8,60 vs 8,84, p=0,28; 5 minute Apgar 9,75 vs 9,82, p=0,54). There were 2 cases of NICU admissions, one in the induced labour group, the other in the spontaneous labour. There were no neonatal deaths.

Conclusion

Our study demonstrates, like others before, that inducing labour in multiparous women increases the risk of an instrumental delivery. Furthermore, and unlike what previous studies show, multiparous women submitted to induction of labour do appear in fact to have an increased probability of having a caesarean section, when compared to women who are not. However, and according to our study, this does not imply an increase in neonatal morbidity or mortality.

Key words: progression of labour, induction of labour, multiparous

Presenter name: Isabel Lobo Antunes

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Labour progression in multiparous women with and without a previous caesarean Section

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Introduction

In our institution a trial of labour (TOLAC) is offered to women with a previous caesarean section who either present in spontaneous labour or by inducing labour, aiming for a vaginal birth after caesarean delivery (VBAC). VBAC has an estimated successful rate that ranges from 40-76%. Whilst labour progression in nulliparous and multiparous women with a previous vaginal birth has scientifically validated patterns, little is still known about how labour progresses in women with a previous caesarean section. Our aim is to compare the duration of the active stage of labour in multiparous women with and without a previous caesarean section, and to try to determine whether a uterine scar increases probability of a surgical delivery.

Materials and Method

Our study is a retrospective cohort study of pregnant multiparous women (≤2 births) at term (≥37+0 weeks of gestation) with single vertex presentation who were admitted to the labour ward of the Hospital Garcia de Orta between January and July 2013. Data was extracted from electronic medical records. All women included had to be in active labour (≥3cm but <6cm dilatation with regular contractility) and all were given loco-regional analgesia. We assessed for duration of labour from ≥3cm until delivery, and type of birth. Women were allocated to 2 groups, depending on whether they had a previous caesarean section (Group I) or not (Group II).

Results

We obtained a sample of 204 women, of which 18,7% (n=38) were allocated to group I. Mean maternal age of women in group I was 32,21 years (±5,18), mean gestational age 38,84 weeks (±1,44) and mean neonate weight 3083 grams (±601). Multips without a caesarean section (group II) had a mean maternal age of 30,91 years (±5,57), mean gestational age of 39,01 weeks (±1,37) and mean neonate weight of 3390 grams (±479). The length of of labour (in hours) for women in group I was 5,08±3,88 versus 3,21±2,65 for women in group II (p=0,007). Women in group I who have a successful VBAC (in our study 71,1% of women) have a mean length of labour of 4,92±3,38, versus 2,92±2,35 hours for women with no previous uterine scar (p=0,006). Using a logistic regression bivariate analysis model, women with a previous caesarean section have a repeat caesarean section rate of 28,9%, comparing with multiparous women with no uterine scar who have a 7,3% caesarean section rate (p<0,001).

Conclusion

When we compare multiparous women with and without a previous caesarean section, our study concludes that the first group will have a longer active phase of labour (first and second stages), and this includes women who end up having a successful VBAC. This is important as it helps clinicians to optimize labour management in women undertaking TOLAC so as to avoid unnecessary and premature intervention. Additionally, and as described in the literature, we confirm that multiparous women who attempt VBAC have a higher probability of having a caesarean section than multiparous women with no uterine scar.

Key words: vaginal birth after caesarean delivery, trial of labour after caesarean delivery

Presenter name: Isabel Lobo Antunes

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CLINICAL AUDIT: A WAY TO REVIEW AND IMPROVE OBSTETRICAL PRACTICE RELATED TO CAESAREAN SECTION AT ST'ANNA HOSPITAL

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Introduction

The rate of caesarean delivery is currently increasing all over Europe, particularly in Italy where it reaches 38% of all child births, with an inter-regional variability between 24% and 60%.

Therefore, it is important to identify the clinical and organizational variables that determine the appropriateness of elective caesarean delivery.

With this aim we chose the technology of Clinical Audit, a process that promotes improvement in clinical practice through systematic review of clinical care in relation with explicit standards derived from scientific literature.

Materials and Method

This is a prospective Audit: in the period between March 2014 and July 2014 we analyzed the medical records of 150 women who underwent elective caesarean delivery at Gynecological and Obstetrical University Hospital Sant'Anna, Turin.

We considered 8 criteria of good practice from the review of national and international guidelines and we elaborated one or more indicators for each criterion, in order to evaluate caesarean delivery rate in the light of these criteria.

Criteria and indicators are: Twin pregnancy with both cephalic presentation (dichorionic diamniotic, monochorionic diamniotic); preterm deliveries (≤32, ≤34 and ≤36 weeks of gestational age); maternal request; maternal age ≥ 45 years; previous caesarean delivery; BMI ≥ 50; HCV and HIV maternal infection.

The rate of caesarean sections found in each criterion was compared with the respective standard in literature.

The value obtained for each indicator has been tested for statistical significance (CI 95%).

We considered performing indicators whose final rate was found to be better or equal to the reference standard.

Results

Indicators:

-dichorionic diamniotic: Performing, CS rate in standards ≤59%; CS rate in criterion 44%;
-monochorionic diamniotic: Performing, CS rate in standards ≤77%, CS rate in criterion 71 %;
-preterm deliveries ≤32 weeks : Non performing, CS rate in standards ≤45,5%, CS rate in criterion 77%;

-preterm deliveries ≤34 weeks: Non performing, CS rate in standards ≤27% , CS rate in criterion 29%;
-preterm deliveries ≤36 weeks: Performing, CS rate in standards ≤18.9; CS rate in criterion 13%;
-maternal request: Performing, CS rate in standards ≤40%, CS rate in criterion 12%;
-maternal age ≥ 45: NS
-previous caesarean delivery: Non performing, CS rate in standards ≤30%, CS rate in criterion 84%;
-BMI ≥ 50: NS
-HCV maternal infection: NS
-HIV maternal infection: NS

NS: Statistically not significance (CI 95%), CS: Caesarean Section.

Conclusion

The majority of the analysed indicators resulted to be performant and we suggest to consolidate the clinical practice that relates to such indicators.

The rate of repeated caesarean sections (indicator 8.1) was significantly higher than the standard value (84% against ≤30%). In order to reduce inappropriate repeated surgical intervention, our clinical audit provides a plan of improvement based on internal protocols, written informations and dedicated counselling for women with previous caesarean sections.

Later in time, we will re-audit the impact of the suggested measures on clinical practice and elaborate further audit items, including non elective caesarean deliveries.

In conclusion we support the use of Clinical Audit as a mean to improve health practice and we encourage comparison of the results and diffusion of the model in other clinical settings.

Key words: Clinical Audit, Caesarean section, Previous Caesarean Sections

Presenter name: Annalisa Piazzese

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IMPROVING CAESARIAN BIRTH: HUMANIZING CAESAREAN SECTION IN A PRIVATE TERTIARY HOSPITAL

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Introduction

Aspects like immediate skin-to-skin contact, early breastfeeding or companion presence during surgery are widespread in vaginal births, but they are not warranted in most Spanish hospital after caesarean section, even though they are often requested in birth plans.

In our private tertiary hospital in Barcelona, following our trend to humanize birth, we started performing caesarean sections with companion presence in 2012 (both planned and during labour). In order to change hospital routines to make caesarean birth more family-centred and increase parents' satisfaction, since the beginning of 2014 all uncomplicated women recovered from surgery in Delivery Room instead of Recovery Room, with an early start of breastfeeding and being able to be skin-to-skin with their babies. After these improvements, we present our second step of humanizing caesarean birth.

Materials and Method

We used a new method of caesarean sections with visual contact and slow foetal extraction in selected cases of cephalic non-emergent caesarean sections. We excluded breech presentation, emergency surgery, meconium-stained fluid, foetal decelerations and mother's medical complications. This procedure was not performed when neonatal resuscitation was expected to be required, when parents did not wish to observe birth, and when the surgeon did not feel comfortable with the technique.

In this new approach we lowered the sterile drape that separated parents' view from mother's abdomen when the baby's head was out of the womb. The baby was slowly eased out while he started breathing, and was immediately given to the mother with midwife's help, with mother being advised to keep her hands off from the operative field. Umbilical cord was clamped after 30-60 seconds, and after that the sterile drape was pulled up again and an extra sterile drape was placed to prevent contamination of operative field. Surgeons' gloves were changed and caesarean section was continued, remaining the baby skin-to-skin with the mother.

Results

During the first nine months of implementation of this family-centred technique we documented 26 cases, where only one incision seroma was observed. No incision infections, puerperal fevers or other complications were observed. Therefore, we are working on a way to humanize caesarean birth with a major satisfaction of parents without having observed severe complications. Our next approach will be trying to encourage the rest of our staff to perform this type of caesarean section when it is possible, and also divulge it among population to let them know they have this option in our hospital when a caesarean birth is needed.

Conclusion

This new approach of caesarean sections has shown increased parents' satisfaction without major complications, something especially important when patients are choosing where to deliver their babies in a moment of decrease of birth rates in our country.

Key words: Humanized birth, caesarean section, caesarean birth
Presenter name: Laura Rodellar

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Is routine full blood count required following caesarean section with an estimated blood loss of ≤700ml? – A mapping audit.

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Introduction

Caesarean section is the most common operation performed in obstetrics1. The average blood loss associated with caesarean section delivery is generally described as being 1000ml2 and it is therefore common practice to perform a full blood count (FBC) on the first post-operative day3 and this is the current practice in our unit.

Recently, there have been a few studies questioning the need and the cost-effectiveness of routine FBC after uncomplicated caesarean sections3,4. We performed a mapping audit to determine the safety of not performing a routine FBC on day 1 post-op following caesarean section with estimated blood loss ≤700ml in our unit.

Materials and Method

A random sample of one-hundred patients that delivered by caesarean section (emergency and elective) at The Royal London Hospital from November 2014 to January 2015 was selected from our recovery unit database.

Estimated blood loss, pre-operative haemoglobin (Hb) and post-operative Hb were obtained from electronic records and the data was analysed using Microsoft Excel® 2010.

Results

Sixty-one per cent of the patients underwent an emergency caesarean section and 39% underwent elective caesarean section. The mean estimated blood loss was 598.5 ± 282.9ml (emergency Caesarean Section 586.9 ± 252.5ml; elective Caesarean section: 616.7 ± 327.5ml). The mean pre-operative Hb was 12.2 ± 1.2g/dL, the mean post-operative Hb was 10.5 ± 1.1g/dL and the average drop in Hb was 1.7 ± 0.9g/dL. Sixteen per cent of the patients were found to have an Hb below 10mg/dL despite having a normal pre-operative Hb and a recorded estimated blood loss of ≤ 700ml. Moreover, 45% of patients had a drop in Hb greater than our mean (1.7g/dL) and of these, 71% had an estimated blood loss of ≤700ml.

Conclusion

The rationale of performing a post-operative Hb following a caesarean section is mainly to diagnose anaemia in the early stage and to identify patients who might require a blood transfusion or iron replacement therapy3, thereby reducing maternal morbidity4. It seems from our study that the average drop in Hb is in accordance with that described in the literature3,4, and we had hoped that we could potentially exclude patients with normal pre-operative Hb and estimated blood losses ≤700ml from having a post-operative FBC, thereby saving time and resources on a busy postnatal ward. However, we found that 16% of the patients would have benefited from at least iron supplementation therapy but would not have been identified under that policy. This may be as a result of underestimation of blood loss which has been described in the literature and commonly found at caesarean section5. We therefore recommend that all women have routine FBC following caesarean delivery. We plan a further audit to confirm our findings and to evaluate the cost-effectiveness of point-of-care haemoglobin testing (using a device such as HemoCue®.)

Key words: Caesarean Section, Blood Loss

Presenter name: Francois Sousa Dos Santos

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THE DEVELOPMENT OF A TAILORED IMPLEMENTATION STRATEGY TO EVIDENCE BASED POST PARTUM HEMORRHAGE GUIDELINES AND EVALUATION AMONG PROFESSIONALS

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Introduction

Despite the introduction of guidelines and training programs, the incidence of postpartum hemorrhage (PPH) shows an increasing trend in developed countries. Substandard care is often found, which implies an inadequate implementation of guidelines. A workable strategy, tailored to current barriers for implementation, is necessary to reduce the gap between evidence-based guidelines and clinical application.

Materials and Method

An strategy to implement evidence-based PPH guidelines and MOET instructions was developed based on diagnostic analyses of barriers to optimal adherence identified among professionals and patients, together with evidence on effectiveness of strategies found in international literature. The process of strategy development was supervised by a multidisciplinary expert panel, and with involvement of patients. After development, the strategy and its individual tools were evaluated in a feasibility trial in three hospitals using semi-structured interviews. The interviews were divided into three parts: exposure, experience (format and self-assessed effectiveness) and overall remarks.

Results

We developed a tailor-made strategy to improve guideline adherence, covering the trajectory of the third trimester till the end of the third phase of delivery. The strategy, directed at professionals, consisted of an outpatient-clinic checklist (OPC), patient-information for patients with in increased risk and labor ward checklist (LWC) with HR patient identification, time-out, and PPH treatment checklist.

During the process evaluation, the professionals judged all tools to increase knowledge on PPH. The OPC was assessed as easy to use with clear format. The patient information was seen as valuable reference material. There was initial hesitation concerning time-efficiency and out of fear to scare patients, to discuss the increased PPH risk, but when given the written patient information it was easily accepted by patients. The PPH treatment checklist was mentioned as initially overwhelming, yet after using it became more familiar and workability improved greatly. All tools were judged as increasing knowledge. The time-out felt to improve communication among team members. The LWC as a whole, with the main focus on the time-out, was chosen as most valuable tool to improve guideline adherence.

Conclusion

We succeeded in the development of a usable, tailored strategy to implement PPH evidence-based guidelines and MOET-instructions, evaluated by professionals as workable and effective.

Key words: Post partum hemorrhage, guideline implementation
Presenter name: S. de Visser

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Audit of Induction of Labour at Newham University Hospital, London, United Kingdom.

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Introduction

In the United Kingdom, one in five deliveries is induced. Induction of labour (IOL) impacts on maternal and fetal health and less than two thirds of women give birth without further intervention. Fifteen per cent of women have instrumental deliveries and 22% have emergency caesarean sections following IOL, hence the need for clear clinical justification.

Materials and Method

All IOL booked at Newham University Hospital in London during the period of a month (01/08/2013 – 31/08/2013) were audited against the Induction of Labour Guideline from NICE (National Institute for Health and Care Excellence – CG70) and the Hospitals' Guideline. Data was collected retrospectively from electronic records and patients' notes and analysed using Microsoft Excel® 2010.

Auditable standards were, amongst others, membrane sweeping, gestation of IOL for post-maturity, proportion of IOL for previous caesarean section, incidence of IOL for non-standard indications, compliance with prescribed methods of IOL and incidence of failed IOL. Other areas of interest were maternal demographics, outcomes of vaginal prostaglandin E2 (PGE2) gel versus controlled-release pessary and overall mode of delivery.

Results

IOL rate was 11.7%. The mean age was 28.3 years (Range: 16 – 39 years) and the average BMI (Body Mass Index) was 27.0 (Range: 17 – 46). Sixty-one per cent were nulliparous and the most common indication was post-dates (40+12/40) followed by GDM (Gestational Diabetes mellitus). Only 41.4% had a membrane sweep and only 12% had two.

The majority of nulliparous women received controlled-released PGE2 pessary for IOL whereas multiparous women received PGE2 gel. There were delays in administering repeated doses of PGE2 in the majority of cases. Labour augmentation with Oxytocin was used in 52% of women with an average duration of 7.5h (Range: 0h40m – 31h00m). Spontaneous Vaginal Delivery was achieved in 71.4% of the cases, Instrumental Delivery rate was 10% and Emergency Caesarean Section rate was 18.6%. The majority of caesarean sections were Category II and there were three caesarean sections for failed induction. Of the caesarean sections for failed IOL, none were compliant with the IOL Protocol.

Conclusion

Our IOL rate was considerably lower compared with the national average. This may be explained by the timing of induction for post-dates (40+12/40). The caesarean section rate was comparable with the National average but our Instrumental Delivery rate was lower and consequently our vaginal delivery rate was higher.

We did a root cause analysis of the caesarean sections for failed IOL and reinforced the need to follow the protocol. We also designed a simple one page proforma that was laminated and affixed on Antenatal Ward and on Labour Ward so that the IOL Policy was readily available and any immediate questions could be clarified. We also encouraged Midwives during our presentation to perform membrane sweep when indicated and to document the reasons when this was not done. The re-audit is currently on going and we aim to be closing the audit loop soon.

Key words: Induction of Labour

Presenter name: Francois Sousa Dos Santos

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PREGNANT WOMEN WITH HUMAN IMMUNODEFICIENCY VIRUS INFECTION - OBSTETRICAL AND NEONATAL OUTCOME – 15 YEARS

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Introduction

Women represent one of the fastest growing populations infected with the human immunodeficiency virus (HIV). Many women with HIV are diagnosed during pregnancy and HIV infected women may choose to become pregnant. Comprehensive medical care of the HIV-infected pregnant female is associated with favorable maternal health outcomes and low rates of perinatal HIV transmission. The aim of this study is to analyze the obstetric and neonatal outcomes at 15 years follow-up of pregnant women with HIV infection in Centro Hospitalar do Baixo Vouga (CHBV).

Materials and Method

Retrospective analysis of clinical processes of HIV-infected pregnant female between 2000 and 2014. Demographic variables, data on HIV infection as well as variables related to birth and the newborn were analyzed.

Results

During the study period were followed in CHBV twenty seven pregnant women with HIV infection. The average age of the patients was 30,7 years old, with range between 17 and 40. Thirty percent were not Portuguese. One quarter were in their first pregnancy, and 42% of all were diagnosed with HIV infection during the pregnancy. Eighty one percent were monitored pregnancies since the first trimester, with an unsupervised or late surveillance in the remain group. In thirty percent were diagnosed co infections. Eighty nine percent of pregnant women with HIV infection have met the protocol of administration of intrapartum intravenous zidovudine. The mode of delivery was cesarean section in 89% and vaginal delivery in 11%. In 70% of cases was scheduled elective cesarean section at term without labor, 15% cesarean in pre-term labor, 11% vaginal delivery and one case of cesarean in labor at term. Some cases of complications of pregnancy with intrauterine growth restriction, gestational diabetes, very pre-term and one case of intrauterine fetal death at 30 weeks. Ninety three percent of the newborns weighed more than 2500 g. It happened one case of mother-to-child transmission. The postpartum period was complicated with infection surgical wound in need of antibiotics in 15%.

Conclusion

Comprehensive medical care of HIV-infected pregnant women is associated with favorable maternal health outcomes and very low rates of perinatal HIV transmission. The use of antiretroviral agents by pregnant women and their children is a critical component of prevention of mother-to-child transmission during the antepartum and peripartum periods.

Key words: human immunodeficiency virus (HIV); pregnant women.

Presenter name: ANA CORREIA

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Comparision of two regimens of labor induction with vaginal 25mcg misoprostol capsules

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Introduction

Misoprostol (a prostaglandin E1 analogue) is an inexpensive powerful uterotonic that can lead to adverse maternal and perinatal effects. Several routes of administration of the drug have been described and it is important to achieve not only the effectiveness but also the safety of each regimen of application of this drug

Objective: To compare the effectiveness and safety of two regimens of Labor Induction using 25 mcg capsules of misoprostol vaginally (4/4h vs 6/6h applications).

Materials and Method

A retrospective study was performed comparing two different regimens of vaginal capsules of 25 mcg misoprostol for induction of term singleton pregnancies - Group A: 25 mcg every 6 hours and Group B: 25 mcg every 4 hours. Both of the regimens were performed for 24 hours and, if not successful, repeated for another 24 hours.

We analyzed the success rate (active labor achievement), the induction-active labor interval and presence of anomalies in uterine contractility and fetal heart rate.

Results

450 cases were included, 250 in group A and 200 in group B. There were no significant differences in the induction success rate (97.2% vs 94%), anomalies in uterine contractility (7.2% vs 9%) or in fetal heart rate tracings (18.0% vs 16%).

The induction – active labor interval were not significantly different between the groups when assessed in all women (10h21m vs 11h03m), however, when we excluded the cases where only one application was required, this interval was significantly lower in group B (16h58m vs 13h23m; p=0.002).

Conclusion

The application of 25 mcg vaginal misoprostol every 4 hours resulted in a smaller induction – active labor interval when compared to the every 6 hours regimen, when it was necessary more than one application, with a similar safety profile.

Key words: labor induction; misoprostol

Presenter name: João Lopes

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Water utilization and its benefits during pregancy,labour and birth

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Introduction

An ACES Arrábida and Hospital de S. Bernardo partnership experiment / result.
Water ,a element for wellbeing, peace, plenitude and harmony has been for a long time sought during pregnancy for its many benefits inrelieving physical and emotional alterations during that period. The utilization of water during pregancy, labour and birth is considered a safe method for both the mother and the newborn as a pain relief and relaxation approach, as long as the appropriate guidance and better practices are followed. Despite controversy, there is no evidence relating to adverse effects to its utilization by both mother and newborn, in low risk pregnancies and labour.

Materials and Method

The prenatal aquatic preparation is aimed to healthy pregnant women from the 28th week onwards. The immersion and water birth is aimed at low risk pregnant women, full term, in active labour, with cephalic presentation fetus and the water temperature should range from 35 to 37 degrees Celsius, during a period of two hours, or up until birth.

Results

The emancipation sensation in water, a physiological rhythm a posture perception, the care of the perineum, the mobility of the pelvis, the participation of the woman's partner, the foetal perception of the qualities of the water, all this aspects allow the must unique experience to women/couples.
" Warm " water, regulates the uterine dynamics during labour; decrease the labour lenght, the perineal trauma, the need for analgesic pain relief and increases the satisfaction levels of women / couples.
These are some of the research results / Rodrigues, Santos & Varela (2014)-Immersion and waterbirth: first portuguese study.

Conclusion

Water immersion as a non-pharmacologic resource in discomforts relief, particulary in the last trimester of pregnancy and as a facilitating factor to the normal / natural delivery and labour process that can be directly translated into health gains. The prenatal aquatic preparation during pregnancy, the immersion in water during labour and delivery significantly reduce pain perception, the need for epidural analgesia, the duration of the labour, as well as the increase of both patient and professional's own satisfation levels, without affecting the good maternal and neonatal results.

Key words: water; physiological; controversy;
Presenter name: Vitor Varela

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The Effect of Intrahepatic Cholestasis of Pregnancy On Intrapartum Fetal Heart Rate Tracings

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Introduction

Unexpected fetal death is an event associated with intrahepatic cholestasis of pregnancy (ICP) that is not predicted by ultrasound, findings on fetal heart rate tracings or any other fetal or maternal characteristic. This study aims to evaluate intrapartum fetal heart rate (FHR) abnormalities of pregnancies complicated by ICP.

Materials and Method

Retrospective analysis of singleton pregnancies with ICP admitted for antenatal surveillance and subsequent delivery. The primary outcome was to compare intrapartum fetal heart rate of pregnancies with ICP and low risk pregnancies (control group). Fetal heart rate tracings were classified according to the ACOG criteria. Secondary outcomes included the evaluation of gestational age at delivery, birth weight, type of delivery and Apgar score at 5th minute. Fisher's exact, x2, and Mann-Whitney U tests were used.

Results

Sixty-eight pregnant with ICP were compared with 121 normal pregnancies. The incidences of indeterminate (category II) (55,9% ICP vs 50,1% control, p=0,55) and abnormal (category III) FHR tracings (ICP: 2,9% vs 3,3%, p=1,0) were similar in both groups. Patients with ICP were older (33,4 vs 29,7 years, p=0,0028), with higher parity (ICP:56,6% vs 34,7% multiparous, p=0,0025) and delivered at an earlier gestational age (36,8 weeks vs 39,3 weeks, p< 0,0001). Cesarean delivery rate was higher in ICP group (29,4% vs 15,5%, p=0,04). Neonatal complications and Apgar score were similar in the two groups.

Conclusion

Pregnancies complicated by ICP did not have a higher risk of pathologic FHR tracing when compared with low risk pregnancies.

Key words: intrahepatic cholestasis, intrapartum fetal heart rate, cardiotocography

Presenter name: D. Martins

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The difference in early development of fetal heart rate dynamics between sexes

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Introduction

Although numerous studies reported general advantages of health of female fetuses over male fetuses, little is known about the dynamics and complexity of fetal heart rate (FHR) variability.In this study, we compare and analyze differences of antepartum FHR indices, dynamics and complexity along the gestational age between male and female fetuses.

Materials and Method

A total of 3,835 singleton term deliveries without maternal and fetal complications were divided into female (n = 1,849) and male (n = 1,986) groups, both separately subject to comparison and analyses. Non-stress test (NST) data obtained from the computerized FHR analysis system. Our outcome measures include linear FHR indices, approximate entropy (ApEn), sample entropy, short-term/long-term exponents (α1/α2), and correlation dimension (CD).

Results

ApEn of female fetuses was consistently higher than male fetuses up to 29–30 weeks of gestation, where it reached its peak. Although the peak of ApEn of male fetuses was at 31–32 weeks, more delayed than female fetuses, the rate of increase was higher. CD of both sexes increased similarly up to near term pregnancy. The α2 rapidly decreased up to 31–32 weeks in both sexes.

Conclusion

Female fetuses exhibit higher heart rate dynamics in earlier gestational periods, which may signify an earlier maturation of the cardiovascular system. The differences we have observed in FHR dynamics along the gestational age seem to suggest that the rate of maturity may depend on fetal sex.

Key words: approximate entropy, computerized fetal monitoring, correlation dimension, fetal heart rate, female, male, non-stress test.

Presenter name: Jeongkyu Hoh

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Effect of antenatal education on course of labor

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Introduction

Several studies, carried out in recent years, have identified positive links between antenatal education and higher rate of vaginal birth, shorter duration of the first and second stage of labour, identification of active labour as well as decreased anxiety. Aim of our study was to determine the effectiveness of antenatal education to influence duration and course of the first and second stage of labour as well as pain management of women.

Materials and Method

40 low risk women recruited to the study were assigned into two groups: 20 women attending antenatal education sessions and 20 with no antenatal education. Data were obtained through observation sheet containing basic information of the mother, the course of pregnancy and childbirth.

Results

Results of the study revealed shorter duration of the first and second stage of labour, lower level of pain and increased use of relaxation aids provided by hospital ward in the women attending antenatal education sessions compared to non-attenders.

Conclusion

This study identified positive effect of antenatal education on duration and course of the first and second stage of labour as well as pain management of women. However, further research is required to explore the impact of antenatal education of women regarding outcomes and course of labour.

Key words: antenatal education, pain, stage of labor,
Presenter name: Martina Baskova

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The influence of Normal Birth Care on the perineal outcome

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Introduction

Childbirth associated perineal trauma can lead to severe morbidity which may affect the daily life of many women. Recent studies, confirm that vaginal deliveries are associated with some kind of perineal trauma. Besides pregnancy and demographic factors, it has been found that the mobility during labour, maternal position at 2nd stage, duration of this, and the performance of an episiotomy are also factors that influence the perineal state. It is believed that the application of the selective use of episiotomy, restricting its application to situations of stress in fetal expulsion and progressive implementation of practices of normal birth care, decrease the degree of perineal trauma. According to this, we have decided to evaluate the influence on the perineal outcome of the implementation of the Normal Birth Care Guideline in the beginning of 2014, which includes the practices recommended by the Clinical Practice Guideline (CPG) in Normal Birth Care (Ministry of Health, Spain 2010).

Materials and Method

We have collected the perineal outcome data of all women who have had a vaginal delivery at the maternity unit in the OSI Debabarrena in 2014. According to evaluate the influence of the Normal Labour Protocol on the perineum, we have compared the data collected, with the data obtained about perineal outcomes in 2009 in the same maternity unit, a year before the publication of the Normar Labour Care Clinical Practice Guideline, published on 2010.

Results

From 621 women attended in 2014, 70% (n = 439) had a vaginal delivery. The episiotomy was practiced to 6% of women who had a normal delivery, 0.68% of women had a 3rd degree tear, 25.28% 2nd degree tear and 20.50% had a 1st degree tear. The 47, 38% of women attended, ended with intact perineum. There was only one 4th degree tear, occurred after performing an episiotomy.

We have observed a decrease in the magnitude of perineal injury since 2009, with a reduction from 10.21% to 6% in the episiotomy rate, and a increase of intact perineum rate from 17.17% in 2009 to 47% in the 2014.

Conclusion

The implementation of practices based on the Normal Birth Care Protocol, have favorably influenced the state of the perineum.

Key words: perineal trauma, episiotomy, tears, labour care

Presenter name: Itziar Aguirregomezcorta

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An Examination Of The Effects Of Neonatal Nutrition On The Sleep And Fatigue Of The Mother

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Introduction

Postpartum period adaptation of the family,factors such as neonatal care can be sensitizing the process.Hormonal changes that occur in the mother's body also causes many physical and psychological changes in the mother.In addition to the features of the hormonal changes increase the sensitivity of the mother,prolactin which is responsible for the initiation of milk production, sustainable provides that the mother herself feel better and rested.Restorative sleep provides.The division of the mothers's sleep in postpartum period also negatively affect the mother's health.Breastfeeding is also seen as an element increasing sleep of the division and fatigue it is a useful source of nutrients for mother and baby.Therefore to determine the relationship between the mother feeding methods of sleep and fatigue will be important.Thus healthcare staff giving the necessary support to mothers and making appropriate interventions in this regard will contribute breastfeeding results in improvement.

Materials and Method

The study was a descriptive and retrospective type, and it was carried out with 245 mothers that were in postpartum week five. The data related to the sleep and fatigue of the mothers in postpartum week one and between week two-four were collected retrospectively. For data collection, the evaluation form of the Nutrition Status of the Neonatal and the Sleep Status of the Mother and the Visual Fatigue Evaluation Form were used. The data was evaluated using Mann Whitney-U and chi-square test.

Results

It was detected that the 54% percentage of the mothers that feed the neonatal with only mother's milk is 51; the percentage of those who breastfeed partially is 49.0 and, as of the end of week four, the percentage of those who perform exclusive breastfeeding increased (71.8%).Examination of the mother's sleep status shows that, even though the total sleep time of the mothers who performed exclusive breastfeeding in the first week is less than that of the mothers who breastfed partially, exclusive breastfeeding mothers considered their sleep as adequate ($x2=25.8$; $p=0.00$) and that they felt less fatigue ($x2=8.67$ $p=0.00$). In the fourth week, however, it was observed that while the total sleeping time of the mothers that breastfed partially was longer than that of the mothers who performed exclusive breastfeeding, they evaluated their sleep as adequate ($x2=44.8$; $p=0.00$) and their fatigue they felt was less ($x2=24.4$; $p=0.00$).

Conclusion

The reasons of those mothers who breastfed exclusively felt more fatigued and did not have satisfactory sleep at the end of the fourth week whereas they had sufficient sleep and felt less fatigue in postpartum first week might be that breastfeeding occurs more frequently, the baby feed keeps the baby full, which render the mother's sleep longer. In order to prevent such reasons from leading mothers to refrain from exclusive breastfeeding, nurses ought to raise awareness among the mothers about the benefits of mother's milk for the mother and the baby and evaluate the attitudes and behaviors of mothers in the course of postpartum controls.

Key words: Breastfeeding, Postpartum Period, Sleep, Fatigue

Presenter name: Merlinda Aluş Tokat

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Intrauterine fetal death in CHTMAD in the last 5 years

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Introduction

The death of a fetus may occur at any stage of a pregnancy, including during the labour process. A pregnancy loss will be devastating for the expectant parents. The overall stillbirth rate is 3.9 per 1000. This study was performed to elucidate the etiology of intrauterine fetal death (IUFD) in CHTMAD.

Materials and Method

The study was retrospective for the period 2010 to 2014. During this period there were 7623 deliveries. Twenty-six stillbirth cases with a gestational age of more than 24 complete weeks were studied.

Results

The ratio of stillbirth was 0.34%. The mean maternal age was 30 and the mean gestational age was 33. Of all stillbirths, 19% were term fetuses and 81% were preterm fetuses. Regarding the distribution of fetal sex, 54% were boys and 46% girls. Of the 26 cases of IUFD, 24 were delivered vaginally and 2 by caesarean section. In 23 of the cases, a causative factor that may be associated with the death could be identified, whereas 2 cases were regarded as unexplained. The most common factors associated with intrauterine fetal death could be identified as infections (19%), placental insufficiency/intrauterine growth restriction (8%), placental abruption (23%), intercurrent maternal conditions (12%), congenital malformations (15%), and umbilical cord complications (15%).

Conclusion

The ratio of stillbirth was 0.34%. In our study, the main cause of IUFD was placental abruption. There were 2 cases regarded as unexplained. The number of stillbirths is higher in preterm than term born fetuses. Recent advances have improved the likelihood of identifying a cause of IUFD. The key to this is a logical and methodical approach to investigation.

Key words: stilbirth, fetal death, cause of death

Presenter name: A. Castro

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Influence of preparation for childbirth and pregnant empowerment in the fear associated with labour

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Introduction

The pregnant tends to question her capacity to deal with the challenges that labour entails. The feelings of uncertainty and anxiety can arise with the approach of delivery, which is something unknown, uncontrollable and simultaneously inevitable. For some women this is so distressing that it generates high levels of anxiety and fear of childbirth.

Objectives: To analyze the influence of preparation for childbirth and pregnant empowerment in reducing the fear of childbirth

Materials and Method

Cross-sectional study, descriptive and correlational, conducted in a non-probabilistic sample of 235 pregnant women in the last trimester of pregnancy, with a mean age of 32.01 years (SD = 5.025). We used a questionnaire of four parts, sociodemographic, obstetric data, delivery expectation scale (Wijma&Wijma, 2005), and the pregnant empowerment scale (Kameda&Shimada, 2008).

Results

Results: We found that 48.08% of pregnant had higher education, 67.6% had a partner, and 79.1% were employed. On average they had 33.93 weeks of gestational age (SD = 3.55), 54.5% experienced a previous birth, in 77.4% the pregnancy was desired, 69.8% were in maternity surveillance and only 26.8 % were attending preparation classes for childbirth. As for the fear of childbirth, we found higher scores in the group of multiparous in the different dimensions of the W-DEQ scale. The subscale Negative feelings in labour, was the one where average values were more differentiated. We also found that at the lowest positive feelings associated with labour corresponds the greatest feeling of self-efficacy; the higher the fear scores (panic and anxiety) the greater empowerment of the pregnant. Similarly, Panic feelings seem to have influence on Future Image, Joy of an addition to the family, and empowerment.

Conclusion

The memories of giving birth have an impact in the lives of women, either in their physical aspects or emotional and social. It's such a remarkable experience that for years, the event and the feelings experienced are remembered in minute detail. The results point to the need to empower women while preparing for parenthood, making it safer, reducing the feelings of fear and anxiety.

Key words: Childbirth; Fear; Empowerment

Presenter name: Manuela Ferreira

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Nuchal cords at birth: what evidences do we have?

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Introduction

The presence of a nuchal cord around the neck at the moment of birth is a common event and checking for and their management become part of the routine practice in attending birth.The association between the presence of a nuchal cord and the notion of risk, is present in the way we deal with this event and has a great influence on parents perceptions of childbirth. The clinical significance of a nuchal cord is controversial. The clinical management of the nuchal cord implies early cord clamping. The latest WHO guidelines, discourage early cord clamping in order to reduce the risk of anemia in the newborn and hipoxia. The aim of the study was to identify the latest scientific evidence on the management of nuchal cord and bring to discussion the best management.

Materials and Method

Integrative literature review from Science Direct , Wiley online library and MEDLINE between the months of December 2014 and January 2015. Keywords used: the nuchal cord, circular do cordão and publication between 2000-2014. Initially were selected 6,630 articles. After the lecture of the abstracts we only considered the articles concerning the presence of nuchal cord at birth getting a total of 34 article and they were our sample for the integrative review and meta-analysis.

Results

The presence of nuchal cord is not related to birth complications or unfavorable outcomes to the newborn. The management of a thigh nuchal cords is routinely made with the early clamping and cord cut. This is assumed as a risk if shoulder dystocia occurs or any other complication, by compromising blood flow of the placenta to the newborn. More studies, with higher level of evidence, are necessary to identify the most appropriate management of nuchal cord.

Conclusion

The early clamping of nuchal cords should be reconsidered in in order to avoid a hazard level of neonatal hypoxia and anemia in infancy. The maneuver Somersault should be considered as one of the possible interventions to resolve nuchal cords, even the thigh ones. Changing the position at birth may contribute to the spontaneous resolution of nuchal cords without any external intervention. In water birth attendants of birth do nothing when a nuchal is present and there isn't record of adverse outcomes related. More studies are needed to bring more evidence to this question.

Key words: nuchal cord, birth outcomes
Presenter name: Guerra, Maria

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Preference of home or hospital birth in a Dutch low risk cohort; the relation with fear of childbirth and sense of coherence.

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Introduction

How do women decide on the place to give birth? In the Netherlands, low-risk pregnant women that are under care of midwifery practises, have to decide where they prefer to give birth. Fear of childbirth (FOC) could influence this decision. Knowledge of FOC of the individual women and the choices they make for their place and mode of delivery, provides an opportunity to improve psychological support around childbirth, and even may decrease interventions. From July 2014 until June 2015 we conduct the Florence study in the Netherlands (region Leiden and Delft). This research aims to provide novel insights in the preference of place of delivery as well as the preference for mode (vaginal or Caesarean section) of delivery. For our theoretical framework for explaining the relation of FOC, with the preference for giving birth at home or in the hospital, we utilize Antonovsky's theory of Sense of Coherence (SOC). SOC is an important factor in how people deal with stressful situations.

Materials and Method

The Florence study is a prospective quasi-experimental cohort study with online self-report questionnaires before and after giving birth, combined with background variables and birth characteristics. FOC is operationalized by the Wijma Delivery Expectancy/Experience Questionnaire (W-DEQ, version A and B). Situational fear of childbirth will be measured with the Situational Fear of Childbirth (SFC) questionnaire. To measure Sense of Coherence (SOC) we use the 13-item Sense of Coherence Questionnaire.

Results

At this moment the Florence study is still in progress. At the time of the conference we expect to have reached our goal of 500 respondents. We will present the preliminary results of this study regarding the preferences that women have for their place of delivery in relation with FOC and SOC. Furthermore the study provides deeper insights and description what women exactly fear for the coming delivery.

Conclusion

Although home birth has a prominent position in the Netherlands, there has been a substantial decline of home births in the last 10 years. This research provides insights in the relation of FOC and SOC with the preference for place of delivery. The specific aspects of FOC will be discussed and compared to the existing research on this topic.

Key words: place of birth, fear of childbirth, preference, sense of coherence

Presenter name: Anne-Marie Sluijs

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TRIAL OF LABOUR IN LOW RISK DELIVERIES AFTER CAESAREAN SECTION

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Introduction

Pregnancy after a previous caesarean section (CS) is associated with a broad range of increased risks. Trial of labour (TOL) rates differs over time and between populations. The objectives of the present study were to explore temporal trends and how maternal age and education predict TOL and failed TOL in low risk pregnancies. The study is based on all deliveries in Norway 1989-2009.

Materials and Method

Since 1967, the Medical Birth Registry of Norway (MBRN) has received compulsory notification of all births in Norway. Our file comprised data from 1967 through 2009, linked to census data on education. Women with a CS in their first delivery and a Robson group 5 second (term, cephalic and singleton) in the period 1989-2009 were included. We excluded women with a record of obstetric or medical complications.

The study population comprised 20, 790 deliveries. The outcomes were trial of labour (TOL) and CS delivery after TOL, termed TOL failure. There were 15, 662 TOL, 4,648 non-TOL and 480 unclassifiable subsequent deliveries. Odds ratios (OR) were adjusted for hospital size, region and parents' country of birth.

Results

During 1989-2009 the TOL rate was 76.3%, with a TOL failure rate 23.3%. The TOL rate increased from 72.5% in 1989-1991 to a maximum of 80.2% in 1995-1997. From 1998-2000 the rate decreased with a low of 71.6% in 2006-2009. The TOL failure rate decreased from 16.7% in 1989-1991 to a low of 10.6% in 1995-1997 and subsequently increased to 18.0% in 2007-2009.

The TOL rate was lower in older women. Adjusted OR: 40 years 0.17 (0.13-0.20). The TOL rate was higher in women with long education. Adjusted OR: 14 years 1.31 (1.18-1.46).

The TOL failure rate was higher in older women. Adjusted OR: 39 years 2.77 (1.98-3.87). The TOL failure rate was lower in women with long education. Adjusted OR: 14 years 0.64 (0.56-0.65).

Conclusion

In spite of an increasing TOL rate 1989-97, the TOL failure rate did not increase. High maternal age was significantly associated with a low TOL rate and a high TOL failure rate. Longer maternal education was significantly associated with a high TOL and a low TOL failure rate.

Key words: Caesarean section, Trial of labour, Low risk pregnancies

Presenter name: S. Lehmann

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MULTIPLE PREGNANCY WITH DEMISE OF A TWIN EARLY IN PREGNANCY – A CASE OF ABRUPTION PLACENTA NEAR TERM

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Introduction

Twin pregnancies constitute an increasing proportion of the total pregnancies in the developed world due to the spread use of fertility treatments and older maternal age at childbirth. Twin pregnancies are associated with higher rates of complications of pregnancy, including the increased risk of preterm delivery, which is the main responsible for perinatal mortality and short-term and long-term morbidity and association in multiple studies with and increased risk of abruption placenta.

Materials and Method

The information of this case report was collected from clinical records and experienced by the authors.

Results

A 33 - year – old woman, with a previously twin pregnancy with death of one twin at 16 weeks of gestational age, was admitted in the obstetric emergency room with severe sudden vaginal bleeding, hypotension and abdominal pain. The couple had a history of long term infertility and the pregnancy was achieved post-fertilization with the result of a monochorionic twin pregnancy. She was pregnant of 37 weeks in the day she was admitted and the fetal focus wasn't perceived at the time. She was in hypovolemic shock and rapidly submitted to a caesarean section with extraction of an unconscious newborn with 2990gr that couldn't be reanimated by the Neonatology team. She received 4units of blood and 4units of plasma and restored vascular perfusion. The umbilical cord of the dead newborn had a marginal insertion in the placenta and the fetus dead at 16 weeks was papyraceous and had the umbilical cord around his neck. The couple received psychological support and the pathological examination of the fetuses didn't reveal any congenital abnormalities.

Conclusion

While the risk to the surviving cotwin in a MC pregnancy is well defined when death of one twin occurs late in pregnancy, the risk with death of one twin in the first trimester is unclear. Compared with singleton pregnancies, additional risks to the survivor after demise of one twin include an increased risk of preterm birth, a reduction in mean birth weight and neurological damage to the remaining twin. Some studies concluded that abruption is twice as likely to occur in twins as in singletons with different risk factors. This suggests that abruption in twins may result from different pathophysiologic processes. It is crucial to closely monitor this multiple pregnancies with death of one twin early in course, particularly in monochorionic pregnancies because the risks and complications are not equal to a singleton pregnancy from the start.

Key words: monochorionic pregnancy; placental abruption;
Presenter name: Ribeiro B.

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Puerperal Septic Pelvic Thrombophlebitis

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Introduction

Septic Pelvic Thrombophlebitis (SPT) consists in the formation of an endothelial thrombus in small pelvic vessels, with an associated inflammatory response. It has been described since the late nineteenth century, and shows high morbidity. This condition still presents a challenge for clinicians, and is usually a diagnosis of exclusion. Its incidence is 1/9000 in eutocic deliveries and 1/800 in caesareans. Using imaging and medical treatment, mortality is inferior to 5%.

Materials and Method

A 34-year-old woman, primiparous, with gestational diabetes, was hospitalized at 37 weeks because of a membrane rupture. A caesarean was undertaken due to labor dystocia. The patient was discharged on the fourth day of puerperium. On the eighth day, she presented to the emergency room with diffuse abdominal discomfort and high temperature (40.6ºC). Hypotension, tachycardia, distended abdomen, and peritoneal irritation were detected. Analytically, no relevant alterations were found, with the exception of PCR 254.

Results

Sepsis of abdominal origin was presumed to be present. An emergency laparotomy was performed, in which widespread peritonitis and several abscessed cavities were identified, without any visible focus. After isolating the microbiological agent, antibiotherapy was administered. The patient was showing good progression during the post-surgery period, until the fourth day, when she started manifesting fever. Septic screening was performed. Sustained pyrexia persisted for 10 days, despite the broad-spectrum antibiotherapy. Septic screening was negative. The patient was referred to a CT-angiography, which revealed left ovarian vein thrombosis. She started therapy with LMWH (1 mg/Kg every 12 hours), and the pyrexia was resolved in 48 hours. She was then discharged and referred to an external Obstetrics and Immunohemotherapy practice. She was under hypocoagulation therapy for 6 months.

Conclusion

The SPT is a diagnosis of exclusion, and the best way to detect it in its earliest stage is with a high level of suspicion.

Key words: Septic Pelvic Thrombophlebitis
Presenter name: Sofia Malafaia

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DOES INDUCTION OF LABOUR WITH DINOPROSTONE INCREASES CAESAREAN SECTION RATE? – PREDICTORS AT ADMISSION

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Introduction

The aim of labour induction is to produce uterine contractions that work on the cervix to achieve a vaginal delivery. Sometimes induction uses drugs that mature and extinguish the cervix to prepare it for labour. Induction of labour is associated with an increase in complications when compared to spontaneous labour, that include worse obstetric and neonatal outcomes and elevated caesarean section rates according to literature. The purpose of this study was tp evaluate induction of labour with dinoprostone performed in our institution in a six month period in terms of indication, obstetric and neonatal outcomes and compare the caesarean section rate of induced labours with spontaneous labour.

Materials and Method

It was a retrospective, transversal and analytic study of the labour inductions with dinoprostone in the period of January to June of 2014 in Braga's Hospital. Sample included 190 pregnant women. Induction with Oxytocin was excluded. It were accessed variables like maternal age, gestational age, parity, indication of induction, Bishop's index, use of Oxytocin during active labour, time of induction until delivery, complications, type of labour, caesarean section causes and number of hospitalized new-borns in Neonatology unit. It was compared the caesarean section rate of this sample with spontaneous labour rates.

Results

Mean age of pregnant women in this sample was 31,5 years. Mean Bishop score at admission was 4 and mean time of induction until delivery was 24 hours. Percentage of nulliparous was 79.5% (n=151). The three main indications for labour induction were 41 weeks of pregnancy (41.6%, n=79), premature rupture of membranes (22.6%, n=43) and gestational diabetes (12.6%, n=24). Most women achieved vaginal delivery (54.2% eutocic labour; 10.5% vaginal operative delivery and 35.8% caesarean section, n=68). The rate of caesarean section in spontaneous labours was 21.4%. Main reasons that led to caesarean section were a not reassuring fetal status (n=25), arrested labour (n=15) and failed induction (n=16). 71.2% of inductions that ended on caesarean section presented at admission with a Bishop score <5 and this was statistically significant (P<0.002). Nulliparity also was related with increased risk for caesarean section (p<0.002). 10.5% of new-borns were hospitalized in Neonatology unit.

Conclusion

Gestational age above 41 weeks was the main indication to induce labour. This study demonstrates the increase in obstetric and neonatal morbidity associated with induction of labour. This was demonstrated by the elevated caesarean section rate compared with spontaneous labour, that was significantly lower which is accordant with other studies. It is necessary to reflect in the indications to induce labour and in the timing to do it. Determination of Bishop score upon admission is a valuable tool and can possibly predict the obstetric outcome once the majority of caesarean sections occurred in nulliparous women and with a Bishop score < 5.

Key words: dinoprostone; labour induction; caesarean section; Bishop score;
Presenter name: Ribeiro B.

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waterbirth-immersion in labour and birth

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Introduction

Healthy women with normal pregnancies, we should expect a normal birth. International and now national figures and statistics show that when we have normal healthy women with normal pregnancies to be birth in large hospitals, the easier to get more medical interventions such as vacuum / forceps, epidural, IV. women is disappointed with them self and the hospital. It is perhaps not so strange when the normal birth is different in a system that thinks for pathology

Water, a element for wellbeing, peace, plenitude and harmony has been for a long time sought during pregnancy for its many benefits. The utilization of water during pregnancy, labour and birth is considered a safe method for both the mother and the newborn as a pain relief and relaxation approach, as long as the appropriate guidance and better practices are followed. Despite controversy, there is no evidence relating to adverse effects to its utilization by both mother and newborn, in low risk pregnancies and labour.

Materials and Method

The prenatal aquatic preparation is aimed to healthy pregnant women from the 28th week onwards. The immersion and water birth is aimed at low risk pregnant women, full term, in active labour, with cephalic presentation fetus and the water temperature should range from 35 to 37 degrees Celsius, during a period of two hours, or up until birth.

Results

The emancipation sensation in water, a physiological rhythm a posture perception, the care of the perineum, the mobility of the pelvis, the participation of the woman's partner, the foetal perception of the qualities of the water, all this aspects allow the most unique experience to women/couples.

"warm" water:

- regulates the uterine dynamics during labour;
- decrease the labour length, the perineal trauma, the need for analgesic pain relief and increases the satisfaction levels of women / couples.

Conclusion

Water immersion as a non-pharmacologic resource in discomforts relief, particularly in the last trimester of pregnancy and as a facilitating factor to the normal / natural delivery and labour process that can be directly translated into health gains. The prenatal aquatic preparation during pregnancy, the immersion in water during labour and delivery significantly reduce pain perception, the need for epidural analgesia, the duration of the labour, as well as the increase of both patient and professional's of the labour, as well as the increase of both patient and professional's own satisfaction levels, without affecting the good maternal and neonatal results

Key words: Waterbirth

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AMNIOINFUSION AND RISK OF DECREASED FETAL WELLBEING

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Introduction

Amnioinfusion consists in the instillation of isotonic solution into the amniotic sac. It is performed during the delivery, through a transcervical catheter and after the rupture of membranes. It is aimed at increasing intrauterine volume or diluting potential pathogenic substances present in it, in order to decrease complications associated with a severe reduction or absence of intrauterine fluid, such as increased risks of umbilical cord compression or meconium aspiration, among others.

Amnioinfusion is thought to dilute the meconium present in the amniotic fluid and therefore to reduce the risk of aspiration. Thus, the aim of this review is to evaluate the effects of amnioinfusion for stained amniotic fluid ("meconium liquor") on perinatal outcom.

Materials and Method

We conducted our literature search through the databases Cochrane Library, Pubmed and UpToDate, using as key words "amnioinfusion", "meconium" and "intrapartum", with studies published between 2000 and 2015. As the main results, our search identified a randomised clinical trial and two case-control studies.

Results

The positioning of the catheter is done transcervically, with the distal end overtaking the fetal presentation. The saline solution container is connected to the catheter and the liquid is progressively introduced into the uterine cavity.

The most commonly used is the 0.9% saline solution, although the Lactated Ringer's solution can also be used. It can be applied at ambient temperature or previously warmed, to avoid the thermal impact on the fetus, and it can infused by gravity or using an infusion pump.

There are two types of intrapartum amnioinfusion: therapeutic and prophylactic. The therapeutic amnioinfusion is used in case of repeated variable decelerations; the prophylactic one is applied in the presence of oligiohydramniosis and thick amniotic fluid. The difference between them lies in the time and velocity of perfusion, and the total volume to be infused is not defined but the process finishes when the situation that gave rise to the amnioinfusion is solved or the expulsive phase of the delivery takes place.

During the amnioinfusion the increase in uterine tone must be monitored, with these being the main potential risks of this procedure: iatrogenic polyhydramnios, umbilical cord prolapse, maternal or fetal electrolyte imbalance, amniotic fluid embolism, alterations in fetal temperature or intra-amniotic infection.

Conclusion

1. Amnioinfusion is beneficial in reducing meconium-related neonatal morbidity, only in settings where facilities for perinatal surveillance are limited.
2. Amnioinfusion is ineffective in settings with standard peripartum surveillance, or its effects are masked by other strategies to optimise neonatal outcome.
3. Amnioinfusion in cases of meconium-stained liquor significantly improved neonatal outcome and caesarean section rate without increasing any maternal and fetal complications.
4. The trials reviewed are too small to address the possibility of rare but serious maternal adverse effects of amnioinfusion.

Key words: amnioinfusion, meconium, intrapartum

Presenter name: Belén Shahrour Romera

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UMBILICAL CORD BLOOD ANALYSIS POSTDELIVERY IN THE ASSESSMENT OF THE NEWBORN

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Introduction

The acid-base status of the newborn is an important factor in establishing the link between intrapartum events and neonatal condition. The analysis of cord blood gases from the umbilical artery is believed to be the best representation of the fetus' acid-base status immediately before birth.

Blood gas analysis is able to objectively confirm or exclude the presence of damaging acidemia, so this information can be useful from medical and medicolegal perspectives.

The aim of this study is to review last recommendations about picking up a sample from umbilical cord blood to objectively measure the well-being and stress levels of the newborn during late pregnancy and birth.

Materials and Method

We conducted a literature search through the databases Pubmed and UpToDate, using as key words "umbilical", "cord", "blood", "delivery" and "acid-base", from published studies between 2000 and 2015. As main outcomes, our literature search provided one systematic review and meta-analysis, including cohort and case-control designs.

Results

Fetal acid-base balance can be assessed in a number of ways, being one of them from the umbilical cord blood sampling immediately after delivery.

This practice is important because umbilical cord blood gas analysis may assist with clinical management and excludes the diagnosis of birth asphyxia in approximately 80% of depressed newborns at term.

The most useful parameter is arterial pH and the mean from the values in term newborns is 7,27. This usually provides the most accurate information on the acid-base status of the fetus, while cord venous blood reflects the acid-base status of the placenta.

A complete analysis may provide important information regarding the type and cause of acidemia and sampling the artery and vein may provide a more comprehensive assessment.

Normal ranges for umbilical cord blood gas values vary and the measurements usually may be affected by several factors related to the method of sampling, storage, assessment or even different factors during pregnancy and delivery.

In that way, some of these studies shown that only a minority of newborns who have low Apgar scores are acidotic at delivery, which suggests that the depression is related to factors other than prolonged hipoxia.

In the following circumstances could be reasonable to analyze umbilical cord blood acid-base postdelivery: severe intrauterine growth restriction, multifetal gestations, intrapartum fever, maternal thyroid disease, breech deliveries, preterm births, meconium staining, an abnormal fetal heart rate pattern, low five-minute Apgar scores, cesarean or instrumental deliveries performed because of fetal compromise.

Conclusion

1. There is no consensus regarding indications for umbilical cord blood acid-base analysis postdelivery.
2. The most useful values for interpretation of fetal-newborn condition and prognosis are the pH and base excess.
3. Blood gas analysis provides the best information regarding fetal acid-base status, so it is able to objectively confirm or exclude the presence of damaging acidemia.
4. Umbilical blood pH and blood gas analysis provides an objective method of assessing immediate newborn condition.

Key words: umbilical, cord, delivery, acid-base, blood

Presenter name: Belén Shahrour Romera

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A MULTIDISCIPLINARY APPROACH TO CORD PROLAPSE

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Introduction

Umbilical cord prolapse is a rare obstetric emergency. It is life-threatening to the fetus so it can have negative outcomes for him. It occurs when the umbilical cord descends alongside or beyond the fetal presenting part and is often accompanied by severe, rapid fetal heart rate decelerations because of the compression of the blood flow in the cord.

Cases of umbilical cord prolapse are an acute obstetrical emergency that should be delivered as soon as possible, by a rapid identification and intervention.

The aim of this review is to determine the main risk factors for umbilical cord prolapse and the appropriate multidisciplinary management to apply when it occurs.

Materials and Method

We conducted a literature search through the databases Trip Database, Pubmed and UpToDate, using as key words “umbilical”, “cord” and “prolapse”, to select studies published from 2005 to 2015. As main results, our search identified four retrospective studies and two descriptive reviews.

Results

There are two types of cord prolapse: overt prolapse, which refers to protrusion of the cord beyond the fetus’ presenting part and is visible or palpable on examination; and occult prolapse, which occurs when the cord presents alongside the presenting fetal part. In this case, the cord is not either visible or palpable.

Main risk factors for umbilical cord prolapse can be classified into two gruops:

1. Spontaneous: Fetal malpresentation, unengaged presenting part, low birth weight (<1500 grams), prematurity, multiple gestation, premature rupture of membranes, abnormal placentation, multiparity, polyhydramnios, long umbilical cord, pelvic deformities, uterine tumor or malformations, congenital anomalies and male fetus.
2. Iatrogenic: amniotomy or iatrogenic rupture of membranes, application of an internal scalp electrode, insertion of an intrauterine pressure catheter, manual rotation of the fetus’ head, amnioinfusion or amnioreduction, external cephalic version in patients with ruptured membranes, application of forceps or vacuum.

The aim in case of cord prolapse is to reach fetal delivery as quick as possible in order to improve the neonatal outcome. The management of the situation must be organized following a multidisciplinary strategy:

Midwife: early diagnosis by monitoring fetal heart rate, vaginal examination after artificial or natural rupture of membranes, relief of pressure on the cord entiring two fingers into the patient’s vagina and elevating the fetal presenting part.

Nursery: installing a venous access, placing the patient in either steep trendelenburg or knee-chest positions until she is able to deliver.

Obstetrician: immediate caesarean delivery.

Conclusion

1. The caesarean section is the preferential way of childbirth when cord prolapse occurs.
2. Umbilical cord prolapse can lead to severe fetal morbidity and mortality, although prompt and appropriate management leads to good overall outcomes.
3. Umbilical cord prolapse primarily happens in the setting of the rupture of membranes without a well-applied presenting fetal part.
4. Risk factors for cord prolapse include spontaneus factors and iatrogenic obstetrical interventions, but many prolapses occur without antecedent risk factors.
5. Decompression can reduce pressure on the cord while preparations are being made for delivery.
6. The interval between cord prolapse and delivery is a major determining factor in the immediate neonatal outcome and perinatal mortality, but not the only factor.

Key words: umbilical, cord and prolapse

Presenter name: Belén Shahrour Romera

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THE PROBLEM OF DELIVERY AFTER ART: CAN WE REDUCE THE INCIDENCE OF CESAREAN SECTION?

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Introduction

In the XXI century rate of cesarean section has increased all over the world: in Russia it equaled to 27%, in Saint-Petersburg – 18.0% (2011-2013). A significant increase in the incidence of operative delivery directly relates to the increase of the infertile couples number and expansion to ART indications. Over the past few decades pregnancy rate after ART has been reached the pregnancy rate when natural cycle and became 40%. However in the group of pregnancies after ART only 10-20% of women were delivered per vias naturalis. Pregnancy after ART is classified as a high perinatal risk pregnancy, and therefore it becomes the most common indication for delivery by cesarean section.

Materials and Method

100 delivery cases were examined using statistical methods. All of the cases included singleton pregnancies as a result of ART.

Results

The average woman age was 35,2±4,7 years. Gynecologic history was complicated with: hysteromyoma (34%), adnexal inflammatory diseases (40%), EGE with an medium severity (30%) and chronic endometritis (12%). Female infertility in couples reached 80%, male - 20%. Urogenital infection was detected in 36% of cases. Somatic history was complicated with: hereditary thrombophilia (44%), varicose vein disease (28%), chronic cystitis (24%) and adhesive disease (24%). Gestation course analysis revealed that 58% of the patients had a constant threatened miscarriage, cervical incompetence (24%), anemia (50%) and preeclampsia (24%), gestational diabetes (20%), IUGR (30%).

In the study group the incidence of preterm delivery was 15% (26,7% of women were delivered vaginally, 20% were routinely operated and 53,3% on emergency basis). The average term of delivery was 34,9±2,1 weeks of gestation. The average birth weight was 2514,7±475,2 grams. The average Apgar score was 6,7±1,83 points. IURG was detected in 66,7% of newborns. Main indications for delivery by surgery were: emergency – fetal hypoxia, planned – woman age, infertility and ART management.

The other 85% of deliveries were term births (15,3% were delivered vaginally, 56,5% were routinely operated and 28,2% on emergency basis). The average term of delivery was 39,1±1,8 weeks of gestation. The average birth weight was 3317,2±514,4 grams. The average Apgar score was 7,7±2,3 points. IURG was diagnosed in 22.3% of cases. Obstetric pathology such as IUGR, preeclampsia and malposition of the fetus in association with woman physical disease were the main indications to routine cesarean section. In 50% of cases emergency operation was prepared with the following indications: fetal hypoxia, premature rupture of membranes and immaturity of the birth canal.

Conclusion

cesarean section rate in women with singleton pregnancies after ART management come up to 85%. But despite a high risk of perinatal complications the number of operative delivery can be reduced of up to 50% in the group of ART-pregnancies.

Key words: CESAREAN SECTION, ART

Presenter name: Alana Agnaeva

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INTRAPARTUM TRANSPERINEAL ULTRASOUND IN PROLONGED SECOND STAGE OF LABOR: IS THERE A CORRELATION BETWEEN THE ANGLE OF PROGRESSION AND DIFFICULT OPERATIVE VAGINAL DELIVERY?

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Introduction

The angle between the long axis of pubic symphysis and a line extending from the inferior part of symphysis to the lower part of the fetal skull, during the second stage of labor, can be measured by transperineal ultrasound. This is an objective and easily performed method to assess the progression of labor.

Objective: To evaluate the correlation between the angle of progression (AOP) and difficult operative vaginal delivery performed due to prolonged second stage.

Materials and Method

Prospective observational study of 22 singleton, term pregnant women with failure of progression in the second stage of labor in which operative vaginal delivery (vaccum and/or forceps) was performed. AOP was measured just before instrument application. Delivery was classified as difficult according to the number of tractions needed, occurrence of third/four degree perineal tear and significant traumatic neonatal lesion.

Results

13 women delivered by vacuum extraction, 7 after forceps application and 2 needed the sequential instrument application. Minimum AOP was 116º and maximum AOP was 179º.

AOP at time of instrument application was not correlated with pregnant body mass index, newborn weight or fetal head position but there was a significantly inverse correlation between AOP and the number of vacuum tractions needed (Kruskall-Wallis, p=0,025): AOP of 155º, 138º, 130º for 1, 2 or 3 tractions, respectively.

There were no records of third/four degree perineal tear or significant traumatic neonatal lesion.

Conclusion

AOP measured by intrapartum transperineal ultrasound appears to be a feasible method to predict difficult operative vaginal delivery in labors that fail to progress in the second stage.

Key words: angle, intrapartum ultrasound, operative delivery

Presenter name: I. Martins

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SUCCESS OF INDUCTION OF LABOUR AFTER A PREVIOUS CAESARIAN DELIVERY

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Introduction

Vaginal birth is considered a valid option for women with a previous caesarean delivery. Since many women require termination of pregnancy before spontaneous onset of labour, it is particularly important to know the success rate of induction of labour in those circumstances and to identify predictive factors of success.

Materials and Method

We conducted a retrospective study analysing the clinical cases of women (with a singleton pregnancy and intact membranes) who had induction of labour and delivery between October 2013 and September 2014 in our institution and had one prior caesarean section. The induction of labour was performed in accordance with department protocol: dinoprostone (vaginal delivery system) when the cervix was unfavourable, or oxitocin in those women with a good Bishop score. The outcome of the induction and possible influencing factors were evaluated.

Results

The success rate of induction of labour (defined as achieving a vaginal delivery) in women with a prior caesarean delivery was 46% (with 38% of those deliveries instrumented). Success of the induction of labour depended on what had been the indication for the caesarean delivery: non-reassuring fetal heart rate – 70%, malpresentation – 40%, failed induction – 25%, failure to progress or cephalopelvic disproportion – 20%. The probability of having a vaginal delivery is significantly higher when the prior caesarean delivery was due to a nonrecurring cause (62%) rather than a recurring cause (21%) (OR 6.1, 95% CI 1.5–25.0). In those cases in which induction ended in a caesarean delivery, the cause was non-reassuring fetal heart rate in 47% of cases, failure to progress in 32% of cases, failed induction in 11%, the remaining being due to other causes. The babies of women subjected to caesarean section due to non progression of labour weighed statistically more (mean: 3669g) than the babies born vaginally (mean: 3054g) (p=0.0106, 95% CI). Induction of labour in women with a previous vaginal delivery (besides the prior caesarean section) was successful in 67% of cases (in contrast to 44% in those who had no previous vaginal delivery). Other factor affecting the success of induction was maternal age: women younger than 35 years were more likely to have a vaginal delivery than older ones (OR 5.4, 95% CI 1.1–25.8). During the period in study, there was one case of uterine rupture (corresponding to 2.86% of cases), without any adverse consequences for the baby. Furthermore, there were no cases of neonatal mortality or of 5-minute Apgar score less than 7.

Conclusion

Almost half the women with a previous caesarean section achieved a vaginal delivery after induction of labour. This approach avoids a repeat caesarean delivery in those women who have not gone into labour, achieving a non negligible additional number of vaginal deliveries. The indication for the previous caesarean delivery is a very important determinant of success: when this had been due to a non-recurring cause, women are good candidates for trial of labour.

Key words: induction of labour, previous caesarean delivery, trial of labour

Presenter name: Alina Seixas

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PERINATAL MORTALITY AFTER 41 WEEKS PREGNANCY: A NATIONAL EVALUATION OF CAUSES AND SUBSTANDARD FACTORS AFTER IMPLEMENTATION OF A CONTINIOUS LOCAL AUDIT

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Introduction

In many countries, there has been a shift in the management of late term pregnancy (41+0 - 42+0 weeks) towards earlier induction. However, in Scandinavian countries and The Netherlands, expectant management until 42 weeks is still widely applied. In the Netherlands, a nationwide perinatal mortality audit has been implemented since 2010. The audited perinatal deaths are registered in a Perinatal Audit Registry System in The Netherlands (PARS). To gain more insight in the causes of perinatal death in late term pregnancies, we analysed the cause of death and substandard (care) factors (SSF) of perinatal death after 41 weeks of pregnancy as identified and registered in PARS by the local perinatal audit team.

Materials and Method

We conducted a qualitative descriptive study on perinatal death classification and SSF of 109 cases of perinatal death, defined as number of stillbirths and deaths in the first 28 days of life, in pregnancies that went beyond >41 weeks between 2010 and 2012. We compared perinatal death classification of these 109 cases with 598 cases of perinatal death between 37+0 and 40+6 weeks of pregnancy registered in PARS. Death classification according to Wigglesworth/ Hey showed when death occurred. The Modified Relevant Condition at Death (ReCoDe) provided information about conditions associated with perinatal death. A SSF is a care management problem involving care that deviated from the safe limits of practice as laid down in guidelines, standards, protocols or normal practice. The entered SSF were independently scored and (re)classified by three of the authors after reaching consensus. Datasets were analyzed using SPSS vs. 20 software. For categorical data Fisher's exact test was used.

Results

Death classification according to Wigglesworth/Hey showed an increase in number of intrapartum death in late term pregnancies in comparison to pregnancies with a gestational age of 37+0 to 40+6 (19.3% (21/109) vs 7.2% (43/598); OR 3.08; 95% CI 1.75-5.44). Most important cause of late term perinatal death according to Modified ReCoDe were asphyxia (26.6%) (fetal, intrapartum and neonatal asphyxia) or placental insufficiency (10.1%). In the modified ReCoDe, fetal congenital anomalies (3.7% (4/109) vs 14.9% (89/598); OR 0.22; 95% CI 0.08-0.61), fetal asphyxia (29.4% (32/109) vs 14.9% (89/598); OR 2.38; 95% CI 1.49-3.80) and intrapartum asphyxia (30.3% (33/109) vs 13.0% (78/598); OR 2.90; 95% CI 1.80-4.65) were different between the >41 weeks group in comparison to the 37+0-40+6 weeks group. In 75 cases (68.8%) >1SSF were described in the >41weeks group. A total of 178 SSF >41 weeks were identified. The most frequent SSF concerned 'cardiotocography (CTG) evaluation and classification' (7.9%), 'incomplete CTG registration or documentation' (5.6%), 'deviation from obesity guideline' (5.1%), 'insufficient documentation in medical records' (10.7%) and 'insufficient communication' (6.7%).

Conclusion

According to this data, intrapartum death, fetal and intrapartum asphyxia were identified more frequent as cause of death in pregnancies with a gestational age of >41 weeks in comparison to pregnancies with a gestational age of 37+0-40+6 weeks. Substandard care in these deaths mainly involved fetal monitoring (evaluation, classification, registration or documentation of CTG), insufficient documentation and communication.

Key words: Perinatal Death; late term pregnancy;

Presenter name: Joep Kortekaas

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CURRENT PRACTICE IN LATE TERM PREGNANCY IN THE NETHERLANDS: A NATIONAL COHORT STUDY

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Introduction

Prolonged/post-term pregnancy, defined as a pregnancy that exceeds a gestational age of 42+0 weeks or 294 days, occurs in 2 -10% of all pregnancies. Labour induction is advised in post-term pregnancy because of the increased risk of adverse perinatal and maternal outcomes. In the Netherlands, there is no consensus on the optimal timing of induction of labour in low risk late term pregnancy, leading to practice variation. We explored the reasons for this practice variation.

Materials and Method

We performed a national survey among community midwives working in primary care practices and gynaecologists working in secondary care practices of non-teaching and teaching hospitals (including academic hospitals). An online Dutch anonymous questionnaire was sent in 2011 to all primary care practices (n=511) and a non-anonymous questionnaire was sent in 2013 to all hospitals with delivery units (n=87). Each questionnaire was filled out by one member of each practice. Questions concerned management and attitude regarding late term pregnancy. We compared responses of primary and secondary care. Statistical analysis was performed using SPSS version 20.0. Chi-Square or Fisher's exact test was used for comparison of categorical data.

Results

Response rates were 39.7% (203/511) for primary care and 91.9% (80/87) for secondary care.
Consultation of secondary care in late term pregnancy is routine policy for 75.0% of the midwifery practices. Consultation in secondary care in late term pregnancies consist of evaluation of fetal movement (92.2%), cardiotocography (87.0%) and transabdominal ultrasound (93.5%) for biometry or measurement of amniotic fluid. Transvaginal ultrasound is no part of routine monitoring and is only performed on indication in 20% of the hospitals even as vaginal examination (always performed 21.1%, on indication 72.3%). Sweeping of the membranes is more often performed in primary care in comparison to secondary care (90.2% vs 30.6%; RR 2.95 (95% CI 2.08-4.19)). Secondary care provides more 'expectant management until 42+0 weeks with monitoring' to women from primary care in comparison to women from secondary care (56.3% vs 38.8%; p=0.039) and induce more women from secondary care at 41+0-41+2 weeks in comparison to women from primary care (21.3% vs 2.5%; p<0.001). Secondary care makes no difference in women from primary and secondary care regarding 'induction at 41+3-41+5 weeks' (1.3% vs 3.8%; p=0.62) and 'elective induction on patients' request' (21.3% vs 27.5%; p=0.46). Agreement of the propositions did not differ between primary and secondary care on 'there's a raise in women's request for induction at 41 weeks because of negative publicity' (80.7% vs 73.8%; p=0.20), 'consultation at 41 weeks reassures the women' (58.6% vs 62.5%; p=0.59) and 'consultation at 41 weeks reassures the gynaecologist' (48.8% vs 60.0%; p=0.11). They disagreed on the propositions 'A secondary care consultation at 41 weeks should be standard practice' (47.5% vs 82.5%; p<0.001) and 'consultation at 41 weeks reassures the midwife' (31.3% vs 50.0%; p=0.004).

Conclusion

In the Netherlands there is no uniformity in the monitoring of late term pregnancy in primary and secondary care. Attitude and policy regarding late term pregnancy differs between primary and secondary care. Results of further studies evaluating optimal timing of delivery in late term (INDEX trial) and term (ARRIVE trial) pregnancies are needed to provide the evidence for a new guideline regarding the management of late term pregnancy which can be helpful to reduce practice variation.

Key words: Management late term pregnancy; primary care; secondary care;
Presenter name: Joep Kortekaas

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The influence on the perineal outcome of the maternal position during second stage of labour

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Introduction

Vaginal deliveries can lead to significant perineal trauma. The active management (manual perineal protection, perineal massage, etc.) or passive management, respecting the physiological process of the birth (hands off, women's own selection for birth position) are the actions that the professionals need to decide in order to reduce the birth related perineal trauma.

Recent studies relate factors as the use of invasive techniques (episiotomy), maternal position during the second stage of labor, non-invasive techniques (application of warm compresses) with variation on perineal injury degree.

A review of Cochrane Library, "Positions in the second stage of labor for women without epidural" (2012) notes that vertical positions decrease the rate of episiotomies. Although this review states that the evidence is not conclusive regarding the influence of maternal position during second stage of labor on perineal trauma, our aim is to analyze this in our maternity unit.

Materials and Method

It has been conducted a retrospective observational study. We have collected the maternal position at second stage of labour of all women that had a normal vaginal delivery during 2014 in the maternity unit of OSI Debabarena. The positions were grouped in upright positions (all-fours, squatting and sitting) and supine positions (semi-recumbent, lateral and recumbent positions) according to the classification made in the Cochrane review cited before.

Results

From a total of 618 women attended in 2014, 70% (n = 437) had a vaginal delivery, of which, 387 delivered in a supine position (88.55%) and 50 (11.44%) in upright position.

In all vertical births, the rate of intact perineum was obtained in 34.4% of deliveries; 1ST degree tear in 34%; 2º degree in 30% and 3rd degree in 2%. The episiotomy was performed in 1 case (2,12%). In supine positions, intact perineum was given in 28,68% of births; 1st degree in 28.24%; 2ns degree in 35,14%; 3rd degree in 0.52% and the episiotomy was performed in 6.78% of all deliveries.

According to the results obtained in the study, the influence of different maternal positions on perineal outcome is not statistically significant.

Conclusion

The maternal position during the 2nd stage is not associated with the grade of perineal tears but it is confirmed that contribute to the reduction of episiotomy rates.

Key words: maternal position, episiotomy, tears, second stage of labor
Presenter name: Julene Legarretaetxebarria

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PREGNANCY OUTCOMES AMONG ADOLESCENT MOTHERS – 6 YEAR EXPERIENCE

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Introduction

Adolescent pregnancy is defined as pregnancy in girls aged 10–19 years. Giving birth during adolescence is not only a risk factor for adverse pregnancy outcomes, but also has a negative impact on the future well-being of the mother and infant. Previous studies have reported an increased incidence of adverse maternal and perinatal outcomes, such as low birthweight, preterm delivery, perinatal death, cephalo-pelvic disproportion and maternal death.

OBJECTIVE: To evaluate obstetric outcomes in adolescent pregnant women in a Maternal Fetal Unit of a secondary hospital.

Materials and Method

Retrospective observational study of pregnant adolescent women, whose surveillance and delivery occurred at Centro Hospitalar de Setubal, between January 2008 and December 2013. The maternal and neonatal clinical records were reviewed.

Results

Between January 2008 and December 2013 there were 10 538 pregnancies, and of these 608 were in adolescents; Adolescent pregnant women: mean age of 17.8 (13-19) years; obstetrics outcomes: eutocic delivery rate 62.7% (381/608), segmentary cesarean rate 24.1% (147/608), Vacuum assisted delivery rate 10.9% (66/608), forceps delivery rate 2.3% (14/608). The mean birthweight was 3117g with 6.1% having low birthweight. There were 43 preterm births (7.1%).

Conclusion

The prevalence of teenage pregnancies (57 per 1000 births) was higher than previously reported data, however the rate of obstetric complications was low. Pregnancy prevention strategies and the improvement of healthcare interventions are crucial to reduce adverse pregnancy outcomes among adolescent women.

Key words: Adolescent pregnancy
Presenter name: Ana Margarida Cunha

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CONSEQUENCES OF THE NEURAXIAL ANALGESIA ON LABOR OUTCOMES. CURRENT EVIDENCE REVIEW

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Introduction

Labor pain is one of the most challenging experiences encountered by females during their lives. Neuraxial analgesia (NE) is the mainstay analgesic for intrapartum pain relief. Many factors influence how women experience and respond to this pain, the intensity of which will increase as labor progresses. Epidural analgesia is an effective form of pain relief during labor, although it is an invasive procedure with side effects and rarely, serious complications. However, since the introduction of neuraxial analgesia into the labor analgesia field, there has been controversy regarding its effects on the obstetric outcome. We have summarized extant research regarding the effects of neuraxial analgesia on labor, focusing on associations between neuraxial analgesia and the incidence of Cesarean and instrumental vaginal delivery and what is the most appropriate time to administrate that.

Materials and Method

Search of current evidence in databases such as COCHRANE, PUBMED OR UPTODATE with keywords “Neuraxial analgesia” OR “Epidural- Spinal analgesia” AND “Labor outcomes”.

Results

A meta-analysis of randomized trials of epidural versus no epidural or no analgesia in labor found that NE was associated with a longer second stage (mean difference 13.66 minutes) and no significant effect on the duration of the first stage of labor. However, the cause of the increased rate of instrumental delivery in patients with neuraxial analgesia is uncertain. One possible explanation relies on the effect of NE on obstetric management. Also, there were significantly more instrumental deliveries in teaching hospitals for patients administered with epidurals. This could have been a result of instructing residents how to perform instrumental vaginal deliveries.

With regard to the effect of NE on the incidence of cesarean delivery, a meta-analysis of 38 randomized trials comparing all modalities of epidural with any form of pain relief not involving regional blockade or no pain relief in labor, concluded epidural analgesia did not significantly increase the risk of cesarean delivery. There are many explanations for the observed association of NE and increased cesarean delivery rate. For example, women who are destined to require cesarean delivery have dysfunctional labor patterns and are more likely to receive neuraxial pain relief during labor.

Different studies show that there were no differences in the mode of delivery or labor duration with CSE Combined spinal-epidural analgesia compared to low-dose epidural.

With regard to time of administration, in randomized controlled trials comparing early to late neuraxial analgesia, there was no increase in the rate of cesarean section or instrumental vaginal delivery. Also, early neuraxial analgesia did not extend the duration of labor in comparison to late neuraxial analgesia.

Conclusion

This review shows that NE does not increase the risk of cesarean section when compared to systemic or no analgesia. Additionally, early administration of NE does not increase the rate of cesarean sections or instrumental vaginal deliveries, nor does it extend the duration of labor. This updated information may correct widely held misconceptions regarding the adverse effects of NE, and encourage obstetricians to actively promote the administration of neuraxial analgesia in response to patients' requests for pain relief.

Key words: Neuraxial analgesia” OR “Epidural- Spinal analgesia” AND “Labor outcomes”.

Presenter name: Ester Ortega Perez

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FLUID THERAPY IN LABOR. EVIDENCE FOR MIDWIFE

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Introduction

Human labor is physically demanding and there are several factors that may influence the normal progression of labour, which have been widely studied, including hydration. Adequate maternal hydration is vital for fetal oxygenation, delivery of nutrients, and removal of waste from the contracting myometrium during labor. It is, therefore, likely that by placing women in danger of dehydration, restricting oral fluids during labor increases the rates of dysfunctional labor and cesarean delivery. It does seem logical that adequate hydration and perhaps supplemental glucose is required to maintain endurance and muscle efficiency during the process of labour and parturition, but is the routine administration of intravenous fluids entirely necessary? The objective is to evaluate whether the routine administration of intravenous fluids to low-risk nulliparous labouring women reduces the duration of labour and also to assess the safety of intravenous fluids on maternal and neonatal health

Materials and Method

Search of current evidence in databases such as COCHRANE, PUBMED OR UPTODATE with keywords “Fluid Therapy” AND “Labor”; evidence of the last five years.

Results

Conventionally, oral fluids are restricted in some labor units because of concern over prolonged gastric emptying time during labor and chances of aspiration if a general anesthetic is required at any time.

Two trials compared women randomized to receive up to 250 mL/hour of Ringer's lactate (RL) solution as well as oral intake versus oral intake only. For women delivering vaginally, there was a reduction in the duration of labor in the RL group. There was no statistical reduction in the number of cesarean sections in the RL group.

Three trials compared women who received 125 mL/hour versus 250 mL/hour of intravenous fluids with free oral fluids in both groups. Women receiving a greater hourly volume of intravenous fluids (250 mL) had shorter labours than those receiving 125 mL.

However, overhydration can be harmful, particularly with hypotonic liquids. In a study that compared women whose sodium concentration remained normal, women who developed hyponatremia were significantly more likely to have received a high volume of fluid (total oral and intravenous fluid volume over 2500 mL) and a high maximum oxytocin dose (20 to 60 mU/min). Two-thirds of the fluid intake was from oral hypotonic beverages. In patients receiving oxytocin at higher doses (>20 mU/min) or for prolonged periods (greater than 12 to 24 hours), it is important to be alert for signs of both hyponatremia as well as volume overload

Conclusion

Although the administration of intravenous fluids compared with oral intake alone demonstrated a reduction in the duration of labor, this finding emerged from only two trials. The findings of other trials suggest that if a policy of no oral intake is applied, then the duration of labor in nulliparous women may be shortened by the administration of intravenous fluids at a rate of 250 mL/hour rather than 125 mL/hour. However, it may be possible for women to simply increase their oral intake rather than being attached to a drip and we have to consider whether it is justifiable to persist with a policy of 'nil by mouth'. The obstetrician must be careful with fluid therapy since this can produce hyponatremia.

Key words: “Fluid Therapy” AND “Labor”

Presenter name: ESTER ORTEGA PEREZ

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ORGANIZATION OF THE HOSPITAL PERINATAL CARE, BASED ON FACILITIES, SPATIAL DISTRIBUTION OF MATERNITIES AND HEALTH INDICATORS. A FRAMEWORK FOR THE REGIONALIZATION OF CARE

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Introduction

Perinatal Unit (PNU) was defined as an organization of health, with specific and variable technological density, based on the concept of stratification of the gestational risk-appropriate care. The UPN spatial distribution in the State of Minas Gerais, Brazil, was implemented, in order to plan and to manage an efficient public Network of Perinatal Care (NPC), comprising a geopolitical division into 13 macro-regions and 77 micro-regions of health (1). Population: 20,734,097 inhabitants. Area 586.519,727m2. Cities: 853, most with less than 10mil inhabitants. This study proposes a methodology for evaluation and reorganization of the public hospital Perinatal Care, dedicated to serving the reproductive health needs of this population.

Materials and Method

The reorganization of this NPC included two stages. At first stage, prenatal care was structured, according to the gestational risk, divided by levels of caring: low, mild (with gestational risk factors) and high-risk (controlled maternal diseases), and high-risk with special flows (severe maternal diseases or complex fetal malformations). At second stage, a framework of the PNU's care profile was proposed based on the regionalization of health assistance, on the local reality and anothers Perinatal Care reported experiences (1,2,3). Empty areas of care in Minas Gerais were considered in this planning. A detailed survey of human resources, facilities, and care profile was used to update information about the PNUs, regarding risk appropriated a care. For this, we used a semi-structured electronic questionnaire containing 650 data entries and local visiting of tutors. Consensus between the State Department of Health, hospital managers and professionals of Perinatal Care defined the methodology for the framework of levels of care.

Results

The proposed criteria to set four levels of the PCU profile was: 1- Low-risk attention: minimum health team (Physician, Midwife). Capabilities to care of uncomplicated term pregnancies. Protocols. Stabilization and transfer for critical care situations. Inpatient discharge criteria. Stabilization and transfer of patients. Facilities: rooming for mother and her baby. 2 - Low-risk attention, with high amount of births: minimum-complete health team (Obstetrician, Paediatrics, Midwife). Capabilities to care of low-risk pregnancies and prematurity >34 weeks of gestation. Protocols. Stabilization and transfer of patients. Facilities: rooming for mother and her baby, neonatal bed support for stabilization. 3 - High-risk attention: multidisciplinary team of experts. Capabilities to care of complicated pregnancies by conditions or well-controlled disease. Protocols. Facilities: adult and neonatal intensive care unit (ICU). 4 - High-risk attention, with high complexity and special flows: multidisciplinary team of experts, with subspecialists. Capabilities to care of pregnancies complicated by conditions or poorly controlled disease and extreme prematurity. Fetal Medicine. Protocols. Facilities: Facilities: adult ICU and neonatal unit progressive care.

Conclusion

We believe that a strategy for PNUs classification, defined in four levels of care, and proposal by consensus with the public governor, hospital managers, and health professionals can provide greater access and equity in Perinatal Care. The proposal is part of a government program of assistance qualification that seeks to impact the quality of Perinatal Care, improving health indicators.

Key words: Standard of Care; Perinatal care; Patient-Centered Care; Delivery of Health Care.

Presenter name: Maria Albertina S Rego

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Can the 'Robson 10 group classification of Caesarean Section' be applied to Midwifery – led Services?

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Introduction

The objective of this study is to analyse if the use of the 'Robson 10 group Classification of Caesarean Section' (RTGC) can be applied beneficially in a Midwifery-Led Service.

Materials and Method

A retrospective study of Caesarean Sections (CS) using the RTGC as applied to all women who booked at 12 weeks gestation to 'Midwifery Led Services'(MLS) in the National Maternity Hospital Dublin, Ireland, over 7 years 2005-2011.

Results

All 3,432 women, irrespective of outcome, were included in the analysis of the results. This includes women who had a homebirth or attended the team of midwives offering antenatal and postnatal care in the community and birth in hospital. In the RTGC, group 1 and group 3 are sometimes referred to as 'the low risk' groups. These groups of women are: nulliparous (group 1) or multiparous (group 3) single fetus, cephalic presentation, term pregnancy in spontaneous labour.

The overall rate of CS in a hospital has risen from 18.3% in 2005 to 21.4% in 2011. But the rate of CS in group 1 has remained similar at 7.3% in 2005 and 7.4% in 2011.

The MLS analysis shows the same trend in group 1. 4.1% in 2006 and 3.6% in 2011. In group 3 the rate was 0% in 2005 and 0.7% in 2011. The ratio for spontaneous to induced labours in nulliparous is 4:1 and 7:1 in Multips. Oxytocin is administered to approx 34% of women in Group 1 and only used in 1.2% of multips in spontaneous labour (Group 3).

The simple 10 group tool allows use to examine other facts such as the nullip/multip ratio, induction rates, percentage of breech presentation, multiple births or vaginal birth rates. The proportion of women that were classified to the other groups apart from group 1 and 3 confirm that all women who booked at 12 weeks to the MLS were actually included in the final analysis.

Conclusion

Outcomes can only be truly compared if we standardise the method of comparison. All Midwifery-led services should produce their statistics so a comparison can be drawn, between other midwifery-led and consultant led services both nationally and internationally. The RTGC works equally well for midwifery led as consultant led services providing all women who register their pregnancy with the MLS are included in the final analysis using the RTGC.

This data can be collected and reproduced by any birthing centre. Our study shows a very low CS rate for nullip and multip women with a single cephalic fetus in spontaneous labour at term as compared to other published results of the Robson 10 groups internationally. We need to concentrate on maintaining a low CS rate in spontaneously labouring women with a single cephalic pregnancy at term (RTGC Groups 1 and 3).

Key words: Caesarean section Midwifery led services

Presenter name: Margaret Hanahoe

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Fetal blood Sampling (FBS) – A midwives perspective.

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Introduction

Much discussion has taken place in the literature regarding the best methods of intrapartum fetal surveillance. The benefits of CTG monitoring, STAN and fetal blood sampling in particular have been passionately debated and mainly been led by Obstetricians. This study reports the experience of fetal blood sampling (FBS) in the National Maternity Hospital focussing in particular on the labour outcomes of single cephalic nulliparous women at gestation ≥ 37 weeks in spontaneous labour. Most importantly though it discusses the findings from a midwives perspective.

Materials and Method

Labour and delivery outcomes were studied from all single cephalic nulliparous women whom delivered at the National Maternity hospital (NMH) a large tertiary referral centre between 1/1/2013 and 31/12/2013. The population studied are the single cephalic nulliparous woman at ≥ 37 weeks gestation Group one in the Ten Group Classification System (TGCS).

Fetal blood sampling is performed as point of care testing in the labour ward at the (NMH). All women in labour have one to one care provided by a midwife. Intermittent auscultation is the method of fetal monitoring in low risk pregnancies Fetal surveillance using cardiotocograph tracing (CTG) is used when risk factors are identified accordance with the intrapartum fetal heart rate monitoring guideline Royal College of Physicians Ireland (2012).

The obstetrician reviews suspicious or pathological CTG tracings. The indication to perform FBS is evidence of a suspicious or pathological CTG tracing. This procedure is performed at the bedside by the obstetrician assisted by the midwife.

The woman is placed in the left lateral position an aminoscope is inserted into the vagina. A fibre optic light source facilities visualisation of the fetal scalp through the cervix. A small sample of blood (200ug) is taken from the fetal scalp through a capillary tube. This sample is analysed on the unit on a blood gas analyser, providing measurement of the pH, BE PO2 and PCO2. The test is complete and result available within approximately eight minutes. Labour management decisions are based on the results of this test

Results

A total of 2040 single cephalic nulliparous women in spontaneous labour were delivered in 2013. These women represent a contribution of 23.3% of the total hospital population. The incidence of fetal surveillance using continuous GTG monitoring was 1790/2040 (87.7%)of this group 424/2040 20.8% had fetal blood sampling performed over the course of their labour. The spontaneous vaginal delivery rate was 1415/2040 (69.4%); vaginal operative delivery 479/2040(23.5%) and caesarean section (CS) rate 146/2040 (7.1%). Fetal reason (no oxytocin used) was the indication for caesarean section in 25/2040 91.2%) of cases and a furthur 72/2040 (3.5%) were delivered for fetal intolerance following the administration of oxytocin to treat dystocia. The incidence of labour length > 12hours was n 59/2040 (2.9%).

The incidence of cord pH ≤ 7.0 in this group was 4/2040 (0.2%) and of Apgar score < 7 at age 5 minutes was 14/2040 (0.7%). Cord pH of <7.0 occurred in 4/2040 (0.2%) of cases.

There were no intrapartum or early neonatal deaths in this group. Therapeutic hypothermia is the standard of care for infants whom present with signs of moderate or severe encephalopathy within the first hours after birth. Hypoxic ischemic encephalopathy was diagnosed in one infant. Neonatal encephalopathy was diagnosed in a furthur three cases. All were treated with therapeutic hypothermia. One case had a subsequent diagnosis of cardiac anomaly and treatment discontinued to enable furthur management. All four infants have normal neonatal follow up to date.

Conclusion

The use of continuous CTG as a method of fetal monitoring is widely used and acceptable to our midwives, obstetricians and women in labour. It is a valuable tool in the provision of intrapartum care. Interpretation of CTG recording remains subjective despite training of staff and guidelines regarding rate, beat to beat variability and descriptive patterns of acceleration and decelerations. Fetal blood sampling provides objective evidence of fetal condition through the measurement of fetal pH. This informs the decision to

allow labour to progress or to intervene if necessary. It may be argued that it is an invasive procedure or indeed that the rate of fetal blood sampling at the NMH is high when compared to other units.
However our results show that outcomes for mothers and infants compare favourably by both national and international standards. Fetal blood sampling provides us with the objective measure of fetal wellbeing in order to care for women in labour and supports our decisions to intervene when necessary. This procedure is simple, fast, and effective. It is performed at the bedside. Both labouring women and midwives view FBS as a useful tool to support our care of the fetus in labour.

Key words: Fetal blood sample,labour,
Presenter name: Martina Murphy

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Special Case: Twin Pregnancy and Idiopathic thrombocytopenic purpura

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Introduction

Twin pregnancy accounts for 2-3% of all pregnancies and twin birth is associated with a higher risk of adverse perinatal outcomes. There are several diseases that present with thrombocytopenia in pregnant women. Idiopathic thrombocytopenic purpura (ITP) is relatively rare in pregnancy (1/1000 pregnancies), with an estimated incidence of approximately 100 cases per million per year in the general population.

Materials and Method

Case reports constitute an exception to this, which should include the sections: 1. Introduction 2. Case report: 3. Conclusion

Results

A 34- year-old woman with a dichorionic diamniotic twin pregnancy and history of ITP and splenectomy in childhood was referred to a multidisciplinary appointment of Obstetrics and Hematology. Because of severe thrombocytopenia, the initial treatment was prednisolone (5mg up to 30mg). Maintenance of the low platelet count at 24 weeks forced us to use intravenous immunoglobulin (IVIg). At 25 weeks she presented common flu symptoms associated with epistaxis and gingival bleeding. A second dose of intravenous immunoglobulin (60 gr.) was given at 26 weeks in view of the low platelet count (1000/mm3). She was admitted at 26 weeks and 3 days of gestation with spontaneous preterm labour. Betamethasone cycle and antibiotic therapy with cefuroxime were completed. Blood culture was requested. Before cesarean section for breech presentation, IVIg was administered in a low-dose followed by two pools of platelets. Two newborns were born with weight 845gr and 600gr and APGAR 5/6/6 and 05/08/10, respectively. Both had platelet and blood (cells red) transfusion, a single dose of IVIg and phototherapy due to hyperbilirubinemia. After prolonged hospitalization, both were discharged with normal platelet count, medicated with iron and an appointment for a posterior follow-up of their neurodevelopment.

In the postpartum, positive blood culture for Listeria monocytogenes was confirmed, so intravenous cefuroxime was administered. During hospitalization the mother was medicated with oral prednisolone 30mg. On the fifth day, she was discharged with a platelet count of 96,000 / mm3. In a two month postpartum appointment there were no hemorrhagic symptoms, and platelet count was 14,000 / mm3. Therefore, it was decided to restart prednisolone 5 mg three times per week. After three months, she remained asymptomatic and platelet count reached 23,000 / mm3. The mother is currently monitored in hematology appointments.

Conclusion

Multiple pregnancy and ITP have a low prevalence. A correct diagnosis in a pregnant woman is critical because anti-platelet autoantibodies can destroy patient's own platelets and also cross the placenta and destroy fetal platelets. Treatment of these women is determined by absolute number of platelets, presence of active bleeding and pregnancy time, being done after guidance of a hematologist. During therapy, the risk of serious infections cannot be underestimated due to immune compromise. This can be responsible for triggering labour as in the presented case.

Key words: Twin pregnancy,idiopathic thrombocytopenic purpura

Presenter name: Diana Vale

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Choice Of Birthplace

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Introduction

The choices women make regarding where to birth their baby have an impact on their safety, experience and NHS resources. In 2009 the government committed to offering all women a choice of birthplace. The Birthplace study (2011) found that women with low risk pregnancies had fewer interventions when birthing in a midwife led unit with no impact on perinatal outcomes. However despite 45% of women being considered low risk for complications in their pregnancy (NICE 2014), 87% are still having their baby in medically led obstetric units (House of Commons 2014).

This project explores if women are informed and consequently involved in choosing where to birth their baby.

Materials and Method

A quantitative research design comprising of an audit of 50 sets of notes and a survey of 30 English speaking women on the postnatal ward. Women were excluded if they had two or more previous caesarean sections or if they had previously experienced a pregnancy with a poor outcome. The audit data was analyzed using IBM SPSS, and the survey was analyzed on excel with the assistance of the trust audit department.

Results

There was evidence of discussion with the midwife regarding birthplace in 44 out of 50 sets of notes, however only 19 women had documented evidence that they had been involved in this choice. 67% of participants in the survey felt they had been given the opportunity to discuss birthplace with a midwife, although 40% reported having to seek additional information elsewhere. 53% of participants were informed of the risks and 51% the benefits of each birth setting.

Conclusion

Women are currently not receiving adequate information to enable them to make an informed decision where to birth their baby. Literature given to women throughout their pregnancy and antenatal education should be reviewed to include more information on the different birthplace settings and their risks and benefits.

Future research should focus on the provision of information for non-English speaking women.

Key words: Information, Choice, Birthplace,
Presenter name: Tina Woodford

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FEMALE DOCTORS EXPECTATIONS ABOUT MANAGEMENT AND ROUTE OF DELIVERY

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Introduction

Pregnancy, labour and delivery are significant events in every women life and usually are associated with expectations, fears and hopes. As obstetricians, we have a privileged contact with these experiences, which will undoubtedly influence our opinion and choice concerning delivery. Although unconsciously, doctors can reflect in their patients these points-of-view. For this reason, we intend to analyse the perception of our colleagues relatively to labour and delivery route of their children.

Materials and Method

An anonymous online questionnaire was taken by female doctors via email or Portuguese medical social networks in January 2015.

Results

We obtained 1370 answers from female doctors between the age of 24 and 66 (mean 33,8). The majority (55%) were residents. Most work at a hospital facility (67%): 40% worked in medical specialties, 16% in obstetrics and gynaecology, 6% in medical-surgical specialties and 6% in surgical specialties. When asked which would be their choice for delivery route, 80% answered “vaginal delivery” (VD). When requested to choose between an operative vaginal delivery (OVD) or a caesarean section (CS), the last one was preferred in 59% of cases. Concerning vaginal delivery, 69% would like to have a prophylactic episiotomy and 78% will choose a Public Hospital as a place to delivery. About 47% already have at least one child. In most cases (54%) they delivered vaginally and 10% had experienced both routes. Of these, 78% would still choose a VD over a CS. Of those physicians who had a vaginal delivery, only 1% would prefer a CS and of those who had a CS, 58% would choose a VD if they could.

Obstetricians where those who choosed more VD (85%) and those in medical-surgical specialties were the ones who wanted more a CS (31%). Obstetricians were also the only ones who preferred an OVD over a CS (56%) and those in surgical specialties the ones who wanted less the OVD over CS.

Those who preferred a CS, 58% were residents and 47% would want to have it in a private hospital. About 42% of them already have children, and the majority (85%) delivered them by the same route.

Considering only the obstetricians, 67% prefer to have an episiotomy and 77% would choose a public hospital. Most (57%) already have children: 54% had a VD and 15% had both a CS and a VD (of these, 72% preferred the vaginal route).

Conclusion

In this female medical population, most would choose a vaginal delivery over a cesarean section, but would prefer a cesarean section over an operative vaginal delivery. Obstetricians distinguished themselves by choosing the vaginal route even in the last scenario. These finding could reflect the general fear concerning the use of forceps or vacuum extractors on the operative deliveries. Public Hospital appeared to be the choice of most physicians, but those who want a cesarean section tend to choose it less.

Key words: Female; Doctors; delivery route
Presenter name: Ana Rocha

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WATER LABOR AND WATER BIRTH: A SURVEY AMONG MIDWIVES IN NORTH-EAST ITALY

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Introduction

Water labor and waterbirth still represents a matter of disagreement between healthcare professionals, mostly dividing midwives and gynecologists. Evidence suggests that water labor reduces the use of epidural analgesia and duration of the first stage. There is limited information about the outcomes in the second stage of labor, that is the reason why according to the American Academy of Pediatrics and the American College of Obstetricians and Gynecologists, it should be considered an experimental procedure . The Authors of an integrative analysis of peer-reviewed literature recently published, reviewed 38 studies, including two randomized controlled trials and 36 observational studies. They pointed out that potential risks associated with water birth for women and newborns seem to be minimal, while the outcomes are comparable to those expected for any healthy childbearing population. Despite the different opinions on this matter, all authors conclude that further research is needed .

Materials and Method

We conducted a survey on water birth in Northeast Italy. A specific questionnaire was created and sent to the Association of Midwives of the following cities: Belluno, Padova, Rovigo, Treviso, Venezia and Vicenza. From 22 January 2013 to 28 May 2014 a total of 149 midwives answered the questionnaire. Statistical analysis was then performed. The aim of the questionnaire was to gain insight into the experience of Italian midwives with water labor and waterbirth as well as their knowledge about possible hindering factors. Underwater labor and birth is strongly criticized because of the low safety standards of the pools. The major fear of healthcare professionals is that this practice does not allow a proper management of obstetric emergency. With our survey we also wanted to understand which approach Italian midwives would like to adopt with a new model of birth pool recently patented, which has been created with the idea to make water birth safer.

Results

: 99% of midwives interviewed believes strongly in the benefits of underwater labor and birth, while 76% states to know the literature on this issue. Nevertheless, only 51% confirms to have received proper training during their midwifery education. More than half of the midwives (69%) states to work in a clinic with birth pools, but most of them (72%) observes that underwater labor and delivery occurs rarely or never. We also asked the midwives which factor mostly hinders water birth. 53% believes that the birth pools currently used are not safe enough, 82% blames gynecologists to be too skeptic, while 93% believes that the main problem is a cultural one. The lack of a structural training of healthcare professionals leads to skepticism and the feeling that this practice is too risky. As for the first hindering factor, i.e. the structure of the birth pool, 73% of the midwives interviewed believes that the obstetric management would be difficult and uncomfortable, while 90% considers the birth pools to be extremely unsafe in case of emergency. For 56% of the midwives the time needed to transfer the patient from the pool to the surgery room for an emergent cesarean section is too long. Among the midwives who think that the birth pool is adequate, 41% never has had an experience with underwater labor and birth. The obstetric blood loss evaluation is surely difficult in case of water birth, and this is a crucial impending factor for 73% of the midwives interviewed.

Conclusion

The most important hindering factor of water labor and delivery in Northeast Italy seems to be a cultural one. A general lack of experience generates ignorance and skepticism on this matter. Italian healthcare professionals would need an adequate training starting in their educational period. Another very important problem evidenced by our survey refers to the birth pools, which seem not to be safe enough.

Key words: water labor, waterbirth, birth pools
Presenter name: Alessia Selmin

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INDUCTION OF LABOR. REVIEW OF EVIDENCE

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Introduction

The cervical ripening is a set of biochemical and functional changes that occur in the connective tissue of the cervix and the final result is softening, shortening and dilation of the same.

It is one of the most frequent procedures in obstetrics.

The induction of labor is considered when the benefits of end of pregnancy for the mother and the fetus are larger than those of allow the pregnancy to continue.

Our objective is to determine the effectiveness of the methods most commonly used for cervical ripening in the achievement of the start of labor.

Materials and Method

Review of scientific literature in the databases PubMed and Uptodate in the last ten years in English and Spanish

Results

The methods available at present for the induction of labor are the pharmacological methods, non-pharmacological and other mechanical methods.

Within each group we will focus on the ones with the most important and clinical relevance based on their wide knowledge and degree of use.

Pharmacological methods,

- Vaginal prostaglandin: E1 (misoprostol)y E2 (dinoprostona)

In women with unfavourable cervix, vaginal ladinoprostona has proved to be more effective than placebo. Its use preferably in removable device. In favorable cérvix, it is an effective induction agent.

The vaginal misoprostol 25 µg is not superior to vaginal dinoprostone for the induction of labor.

- Oxytocin: is the most frequent form of induction of labor. It has not demonstrated superior efficacy to the vaginal prostaglandin E2, with a cesarean section rate higher in case of unfavourable cervix.

The use of oxytocin associated with amniotomia should be reserved for contraindication of women in the use of vaginal prostaglandin.

Non-pharmacological methods,

- Detachment of the membranes or maneuver of Hamilton: It consists in the introduction of a finger at the level of the OIC, making a movement of 360 degrees to take off the lower pole of the bag, thus obtaining the release of prostaglandins. Its use has been associated with a reduction in the duration of the pregnancy and the frequency of pregnancy beyond week 41.
- The rest of methods such as herbal supplements, acupuncture, homeopathy, sex and nipple stimulation lack sufficient evidence to recommend its use as inducers of labor or cervical ripening.

Other mechanical methods,

- Amniotomia: consists of the deliberate artificial rupture of membranes. The use of this maneuver alone, it is not recommended as the primary method of induction of labor.

Conclusion

The cervical ripening enables the improvement of the cérvix conditions, thus increasing the success rate of vaginal births in the inductions and decreasing the dilation time and the percentage of cesarean sections.

El conocimiento de métodos eficaces de maduración cervical permitirá dispersar una atención sanitaria de calidad, acorde con la información científica más reciente y relevante.

Knowledge of effective methods of cervical ripening will disperse a quality health care, in line with the latest and relevant scientific information.

Key words: induction of labor and cervical ripening and methods.

Presenter name: María del Mar Carrillo Martínez

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MULTIDISCIPLINARY APPROACH IN THE TREATMENT OF PREGNANT WOMEN WITH DIASTASIS SYMPHYSIS PUBIS - CASE REPORT

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Introduction

Fear of childbirth due to a previous traumatic obstetric event, also known as secondary tokophobia, is present in 6-10% of pregnant women. The management of a pregnant woman with pelvic girdle pain and a present fear of childbirth must be approached with special care. It requires multidisciplinary management of a doctor, midwife, physiotherapist, occupational therapist and psychologist / psychiatrist. The pregnant woman should receive the adequate information that are going to help her understand the nature of pain, minimise her anxiety and also at the same time be an incentive for her to be an active member in the process of the healthcare treatment. She needs to understand that the issue is not harmful either for her or her baby and that it is most likely to improve.

Materials and Method

Purpose: To present an example of team management of a 39-year old patient during her second pregnancy. Her first pregnancy resulted in a diastasis symphysis pubis, which put her great fear of another injury of the pubic bone in the forefront.

Methods: After a consultation with a psychologist the patient (in her 29th week of pregnancy) was referred to a physiotherapy treatment at the UMC Ljubljana's Division of Gynaecology and Obstetrics. She complained of moderate pain in the pelvic ring. Her fear of another injury of the pubic bone during childbirth was in the forefront. Her physiotherapeutic treatment lasted for 2 months. It included physiotherapeutic advice on the correct mechanics of movement, postures that should be avoided, learning therapeutic exercises to stabilize the spine and pelvis, and pelvic belt application. Towards the end of the treatment we measured the painless range of hip joint abduction and have, together with the gynecologist, discussed the mode of delivery and in the case of vaginal delivery, the most appropriate position during vaginal childbirth. In order to assess the effectiveness of treatment, the Fear-Avoidance Beliefs Questionnaire and the visual analogue scale were used before and after the treatment

Results

The Fear-Avoidance Beliefs Questionnaire given to the patient at the end of the treatment showed a decrease in her anxiety (from 23 point to 17). The baseline score of visual analogue scale was 5 and the post-treatment score was 2.

The patient was admitted to the labour ward of the UMC Ljubljana's Division of Gynaecology and Obstetrics in the 39 1/7 week of pregnancy due to contractions and an 8 cm dilated cervix. After rupturing the membranes and an application of an analgesic the labour progressed quickly. Within an hour the patient gave birth to a healthy baby boy (3510-52-35), Apgar score 9-9. The recommendation given by the physiotherapist regarding the correct mechanics of movement, appropriate obstetric position and avoiding excessive abduction of the lower limbs were taken into account during labour. The patient then underwent manual removal of the placenta and stitching perineal lacerations of the 1st degree. The overall bleeding was assessed to 300 ml. The women and the newborn were admitted to the Postnatal Ward, where the physiotherapeutic assessment of pelvic girdle pain was performed. The pain was reported as normal. The patient immediately began activating the transversus abdominis muscle according to the instructions she had been given during pregnancy. The mother and baby were discharged to home care on the 3rd day since the postnatal period was uneventful. They patient received written and oral instructions and a date for a regular check-up.

Conclusion

Pelvic girdle pain during pregnancy, labour and/or in the postpartum period requires multidisciplinary treatment. This approach helped us to reduce the patient's anxiety of another labour and reduce the risk of injury to the pelvic girdle during labour; furthermore, we have succeeded in preventing the patient's long-term physical and psychological disability.

Key words: pregnancy, pelvic girdle pain, labour
Presenter name: ANITA PRELEC

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Emergency peripartum hysterectomy- Cases report

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Introduction

Emergency peripartum hysterectomy is a demanding obstetric surgery performed on life threatening hemorrhage situations.

Major causes are abnormal placentation, uterine atony or rupture. Main risk factors are scarred uterus, multiparity and maternal old age. Complications such as need of blood transfusion, bladder injuries, DIC, vaginal cuff bleeding are common.

Materials and Method

Review of the three cases of emergency peripartum hysterectomy that occurred in our Department during 2014

Results

1. 33-years old woman, G2P1 (vaginal delivery), comes to the E.R at 39 weeks and 5 days in labour. Active phase of labour lasted about two hours and resulted on eutocic delivery (female newborn 3330g). After profuse postpartum hemorrhage thus uterine atony that did not respond to uterotonics, she was taken to the O.R, where cervical- vaginal lacerations were excluded and decided to perform a subtotal hysterectomy. At day 6 post-operative she was discharged with good clinical evolution.

2. 33 years old woman, G2P1 (vaginal delivery), comes to the E.R at 38 weeks in labour. The fetus was in breech presentation with estimated weight in 75th percentile so it was decided to perform a cesarean section (male newborn 3490g). In the recovery room, she started with abundant postpartum hemorrhage by uterine atony that did not respond to uterotonics, so medical team decided a total hysterectomy. An hour later the patient developed a hypovolemic schock . Abdominal ultrasound showed a vaginal apex hematoma with 9 cm associated with peritoneal fluid. Patient was re-opened, peritoneal toillet and hemostasis review were performed . She was transferred to the ICU, staying there for 4 days and was discharged at day -14.

3. 39 years-old woman, G3P0, 35 weeks and 1 day, with total placenta previa, comes to the E.R with mild temporal headache, slight blood pressure elevation and proteinuria. It was decided to proceed to fetal extraction by C- section due to mild pre-eclampsia (female newborn 2230g). The placenta removal was incomplete. Due bleeding of placental bed, she received uterotonics and uterine tamponade. Besides this measures a total hysterectomy was performed. She was discharged at day 9 post-operative, with good evolution. The histological exam of the placenta was compatible with placenta accrete.

Conclusion

The most frequent cause of emergency peripartum hysterectomy was uterine atony. No risk factors were found in the two women described.

Key words: hysterectomy; uterine atony; placenta previa

Presenter name: Vera Veiga

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Placenta accreta- Case report

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Introduction

Placenta accreta occurs when placenta invades uterine wall. It is a rare condition with a reported incidence of 1:2500 pregnancies. Imagiologic diagnosis is difficult, so antepartum identification of women with risk factors, such as previous cesarean section, previa placenta, previous myomectomy or submucous leiomyomas, is essential to presume most cases, plan delivery and minimize maternal morbidity and mortality.

Materials and Method

Case report of placenta accreta attended at our Department in 2014.Data were obtained through medical files consultation.

Results

A 39 years-old healthy woman, gravida 3 para 0, with a diagnosis of total previa placenta, presented our emergency service at 35 weeks and one day, with mild temporal headache and slight elevation of her blood pressure (average BP 150/92mmHg). Her labs showed slight elevation of LDH and ALP and proteinuria. At admission day-2 thus clinical and analytical aggravation, fetal extraction by caesarian section was decided. It was born a live female, weighing 2230g, with an APGAR score of 9/10/10. Afterbirth was verified that placenta was embedded in myometrium so it total extraction was impossible. Due massive hemorrhage of placental bed it was initiated theraphy with uterotonics and an uterine tamponade with a Foley catheter was performed. Besides this conservative measures, a total hysterectomy was decided and occurred without complications. Patient received 2U of RBC during surgery. Pos-operative evolution was favorable with discharged at day-9. Histology of placenta confirmed the diagnosis of placenta accreta.

Conclusion

Placenta accreta is a potentially life-treatening obstetric condition that requires a multidisciplinary approach to management.

Key words: placenta previa; placenta accreta; hysterectomy
Presenter name: Vera Veiga

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CHILDBIRTH IN WATER: A BIRTH IN HARMONY

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Introduction

This study is a report of an experiment carried out in a Birth Center at a public hospital located in the eastern zone of the city of São Paulo, Brazil. The birth center was inaugurated in 2005 when eight childbirth rooms were established. The area where the hospital is located has a population of about 3.3 million people and the active economic population consists of 1,704,858, representing 31% of the labor force in São Paulo. An estimated 904,089 workers are unemployed and of those, 358,282 live in the eastern zone of São Paulo, i.e. 40%. Moreover, it is an underprivileged region with high levels of violence. The Birth Center was an achievement for the population. It allows the use of a birth pool during labor and birth as an option of childbirth for women who live in the area. Water childbirth is a harmonious way of birth for mother and baby. It reduces the stress of pain in labor and promotes a smooth transition from intrauterine life to life outside the womb.

Materials and Method

The World Health Organization (WHO), based on scientific evidence supports the woman's right to choose the place of birth and the manner of childbirth. The International Confederation of Midwives (ICM) encourages normal births, considering that most women have pregnancies and births as a physiological event. They also support giving women the choice of a water or home birth. Scientific evidence shows high maternal satisfaction with the birth experience in water and observed as well that a newborn baby starts the extra-uterine life harmoniously. In the book Sunrise Smiling, Frederick Leboyer (1996) defends the thesis that birth should be without violence, without trauma and without pain.

Results

The water birth, associated with the principles of Leboyer, allows childbirth in pleasant surroundings, where the baby can join the mother in a protective maternal embrace, in quietness, and a later cutting of the umbilical cord. One night, a pregnant woman in labor came to the Birth Center accompanied by her husband. This was Hope's (a fictitious name), third pregnancy, whose previous deliveries were with forceps and a Cesarean. We offered the pool with hot water for pain relief, and after an hour the baby was born in the water. The baby stayed warm held in the comfort of Hope's arms, calm and quiet. The neonatal doctor allowed the baby to stay while it nursed and opened its eyes. It was an emotional moment during which the father allowed tears to run down his face. Hope said that she would never forget this birth, because she had been blessed to have it in her last pregnancy. Each of the water births that we witnessed at the Birth Center were unique and special for each family. However, I never heard a newborn baby cry immediately after the water births I attended as a midwife in the Birth Center. The newborns' expressions were always with open or closed eyes, as well as their mouths, with the mother looking at the baby, snuggled up in her arms combined with the delight of early breastfeeding. Time and silence, joy and excitement, maternal ecstasy and fathers crying, all converge in gratitude.

Conclusion

In conclusion, water births, with low-risk women which were accompanied by prenatal surveillance naturally culminated in a humanized delivery. They focus on the trio of mother, baby and companion, where the benefits of the principles of Leboyer are evident, resulting in births to the satisfaction of all stakeholders, the trio and the health professionals, and they always point to the horizon of excellence in health care.

Key words: Parto na água; parto humanizado; parto Leboyer; parto natural.

Presenter name: Joyce da Costa Silveira de Camargo

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Birth classes and birth experience

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Introduction

Birth is a unique experience and the majority of nulliparous woman have limited knowledge about it since there is little discussion about this topic in society. Still it influences the future of every family. Birth classes are the opportunity to explain what is birth, what to expect and how to deal with it. In this study we compare a group of puerperal women who have attended birth classes with those who did not, in order to understand the differences regarding birth occurrences and outcomes.

Materials and Method

Cross-sectional study in a tertiary care maternity in Almada, Portugal. A portuguese adapted Birth Satisfaction Scale-Revised (BSS-R, score ranging from 0 to 28) was used in 116 primiparous. Data regarding birth was extracted from clinical files. The statistical analysis was done in SPSS. To compare groups we used chi-square test and paired-t student test.

Results

In our study 59 women (50.9%) attended birth classes. This group was older than the one who did not attend (29.85 vs 26.44, $p=0.001$), had higher educational level (53.4% vs 16.1% attended college, $p<0.001$) and less unemployment (10.2% vs 36.8%, $p=0.001$). The birth satisfaction score was higher in the attending group (17.75 vs 15.81, $p=0.001$). There were no differences in labour duration, labour induction, epidural frequency, type of delivery, perineal trauma and neonatal outcomes. Statistically significant differences were found in birth position (lithotomy 59.2% vs 91.3%, $p<0.001$), labouring alone (1.7% vs 12.3%, $p=0.024$), changing position during labour (62.7% vs 38.2%, $p=0.009$), relaxation shower (35.6% vs 17.5%, $p=0.028$) and drinking clear liquids during labour (35.6% vs 17.5%, $p=0.057$).

Conclusion

Despite not influencing birth outcomes, birth classes improve woman's birth satisfaction and increase the use of non-pharmacological interventions to cope with birth.

Key words: Birth class, Birth satisfaction

Presenter name: Mariana Torres

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Birth satisfaction: what makes labouring women happy?

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Introduction

Birth is a major event in a woman's life. Promoting a positive birth experience is more than just ensuring that the mother and her infant are physically well at the conclusion of pregnancy. Dissatisfaction with childbirth care can have a negative impact on a woman's health and well-being, as well as in her relationship with her infant. Our aim is to identify the factors contributing to increased satisfaction in puerperal women.

Materials and Method

Cross-sectional study in a tertiary care maternity in Almada, Portugal. A portuguese adapted Birth Satisfaction Scale-Revised (BSS-R, score ranging from 0 to 28) was used in 250 puerperal women. Those with elective cesarean and twin pregnancy were excluded. The statistical analysis was done in SPSS and paired-samples t test was used to compare satisfaction rate between groups.

Results

The mean satisfaction score was 17.00 (standard deviation was 4.9). The average age was 30.26 years and women older than 30 years were more satisfied in birth than younger women (17.9 vs 15.9, p=0.001). There were no differences in satisfaction regarding parity. Other demographic characteristic associated with a higher satisfaction score was high education level (17.9 vs 16.5, p=0.042) and employment (17.4 vs 16.0 but not statistically significant - p=0.073). Most labour characteristics did not affect satisfaction in a significative way (labour induction, amniotomy, epidural, oxytocin labour augmentation, pethidine administration, changing position during labour and delivery, relaxation shower). The most influential factors were vaginal delivery (17.6 vs 13.9, p<0.001), hospital admission in active labour (18.6 vs 16.3, p=0.001) or when more than 5 cm dilated (19.2 vs 16.8, p=0.022), allowance to drink during labour (17.5 vs 16.2, p=0.048) and non-episiotomy (18.3 vs 16.1, p=0.003). There was no difference between vaccum-assisted delivery and forceps delivery (14.9 vs 15.0, p= 0.972) or between vaginal dystocic delivery and cesarean section (14.9 vs 13.9, p=0.372). Post-partum hemorrhage was associated with less satisfaction, but it was not statistically significant (11.3 vs 17.1, p=0.051). There were 21 cases of newborns with umbilical artery pH under 7.20, but there was no statistical significant association between umbilical artery pH and birth satisfaction level.

Conclusion

The way that labour unfolds can affect woman's satisfaction. It is important to evaluate if neonatal and puerperal outcomes are influenced by woman's preferences in labour and birth management. If proven to be safe, measures should be taken to improve satisfaction in birth.

Key words: Birth satisfaction
Presenter name: Mariana Torres

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Pregnancy and congenital reproductive tract anomalies - a year at Faro Hospital

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Introduction

Congenital or acquired reproductive tract abnormalities may preclude pregnancy or increase the incidence of poor obstetric outcomes, compared to pregnant women with anatomically normal uteri. Congenital reproductive tract anomalies result from abnormal formation, fusion or resorption of Müllerian ducts during fetal life.

The prevalence of congenital uterine anomalies is 1-10% in a random population, but it has been estimated to affect 5-30% of women with a history of miscarriage.

The congenital anomalies increase the risk of infertility, recurrent miscarriage, ectopic pregnancy, fetal growth restriction, placental abruption, abnormal fetal presentation, preterm delivery, caesarean delivery, dependent on the anomaly.

Materials and Method

The authors report the cases of six pregnant women referred from primary care to our institution because of an uterine malformation, during 2014. Diagnosis methods for each patient could not be clarified since they had been recognized as having uterine anomalies before becoming pregnant.

Results

The prevalence of uterine malformations in our hospital was <1%. Five patients had bicornuate uterus compared to one who had septate uterus. All the patients were primigravidas, with the exception of one patient, who had a previous ectopic pregnancy and a miscarriage. Four of these patients had spontaneous pregnancies, while the remaining were subjected to assisted medical procreation.

The results were: 4 live births, 2 of them as term eutocic deliveries, and other as 2 caesarean section for breech presentations – one of them in a preterm pregnancy (32 weeks) hospitalized since 24 weeks. One patient had a spontaneous abortion at 13 weeks and another one had a spontaneous abortion at 22 weeks.

Conclusion

Our outcomes are similar to those previously described in literature. However, our resulting prevalence of congenital uterine anomalies was found to be lower, meaning the pregnant women may have not been diagnosed or were not referred to our hospital.

It would be important to improve our ability to diagnose these malformations in order to classify the anomaly and make the adequate follow up, while promoting the awareness for providers in regards to these conditions and its complications during pregnancy and delivery.

Key words: uterine malformation, bicornuate uterus, septate uterus

Presenter name: A. Edral

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A MODIFIED NEWMAN SCORE: prediction of the success of the external cephalic version with the Amniotic Fluid Index

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Introduction

External cephalic version (ECV) has been associated with a success rate ranging from 35% to 86%. Several scores have been created to predict its outcome but none has showed to be a strong predictor on the success of ECV. Newman's scoring system (NS) is an easily applicable tool, which considers parity, fetal weight, cervix dilatation, station of labour and localization of the placenta as influencing variables, although it has a disappointing prediction power. Some studies suggest amniotic fluid index (AFI) as a significant factor for ECV success. This study aimed to compare the performance of NS and a modified NS score including the AFI (NS/AFI).

Materials and Method

Data was retrospectively collected from 164 women that underwent an attempt of ECV in our institution during December 1999-January 2015. NS was determined for every women as well as the AFI. NS/AFI was calculated by combining NS and AFI score. Receiver operating characteristic (ROC) curves were constructed to assess the discriminatory power of NS and NS/AFI for predicting the outcome of ECV.

Results

ECV had an overall success rate of (47%) in our sample. NS showed globally a poor prediction power of ECV success, when a ROC analysis was performed (AUC of 0,530). The logistic regression analysis showed that AFI was a significant predictor of ECV success (RR 1,015; CI 95% [1,006-1,024]). AFI stratification according to percentiles 33 e 66 was the best method for optimizing the prediction power of NS. The inclusion of AFI into the NS ameliorated the AUC to 0,570.

Conclusion

We suggest including AFI as an additional parameter for Newman score, as our data shows an improvement on the prediction of success of ECV.

Key words: external cephalic version, newman score, amniotic fluid index

Presenter name: R. Mendes Silva

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Identification Of Obstetric Targets For Reducing Cesarean Section Rate Using The Robson Ten Group Classification In A Tertiary Level Hospital

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Introduction

To analyze caesarean section (CS) birth rates using Robson Ten Group Classification System (RTGCS) and identify the main contributor of the CS rate in an Italian tertiary level hospital.

Materials and Method

A total of 17,886 deliveries in six (1998, 1999, 2004, 2005, 2010, 2011) of a 13-year period was analyzed using RTGCS.

Results

Over a 13-year period a rising CS birth rate from 38.7 to 42.7 per 100 births was calculated ($p<0.001$) in association with a significant reduction of vaginal delivery (VD) (59.7 vs 53.7%; $p<0.001$). In multiparous women with a previous CS (Group 5) a repeat CS was performed routinely (CS rate 99.9%), resulting the most contributor of the CS rate (15.3 vs 16.2%; $p<0.001$). Nulliparous women with singleton cephalic full-term pregnancy in spontaneous or induced labour onset resulted the second group characterized by a high CS rate (Group 1, 3.3 vs 4.7%; $p<0.001$; Group 2, 3.5 vs. 4.5%; $p<0.001$).

Conclusion

The growing and uniform distribution of CS has been observed over a 13-year period. By RTGCS for an easy identification of the leading contributing patient groups, we identified multiparous women with a previous CS and nulliparous women with singleton cephalic full-term pregnancy in spontaneous or induced labour onset. This analysis provides evidence-based data for encouraging the development of selected improvement in perinatal care, taking into account all the possible factors, local resources and available expertise, in order to reduce CS rate.

Key words: Cesarean section, Robson Classification, tertiary level hospital, vaginal delivery.

Presenter name: Stefania Triunfo

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New gestational diabetes screnning: impact on prevalence and associated comorbidities

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Introduction

Gestational diabetes mellitus (GDM), defined as “glucose intolerance with onset or first recognition during pregnancy” has been subject of multiple studies.

There is consensus that overt GDM is associated with adverse perinatal outcome. However, the risk of such outcomes associated with less severe levels of hyperglycemia is controversial.

The results of the Hyperglycemia and Adverse Pregnancy Outcome (HAPO) study indicated an association of lower glucose levels with adverse maternal, perinatal and fetal outcomes. Following this publication, the International Association of Diabetes and Pregnancy Study Group (IADPSG) issued new recommendations about GDM screening which were adopted in Portugal in 2011.

The aim of this study was to evaluate if there were differences in the prevalence of GDM before and after the implementation of the new recommendation and to compare obstetric and perinatal outcomes in women with and without the diagnosis of GDM in that period of time.

Materials and Method

Retrospective study that included all women with GDM in 2010 and in 2012, whose labour took place in our hospital. Demographic data, prior medical and obstetric history, type of delivery, perinatal outcome and results on postpartum screening were obtained through consultation of clinical data. Statistical analysis was performed by SPSS 2010. For categorical variables, the chi- square test or Fisher's exact test were performed and for continuous variables the T ' student test.

Results

In the study period, we had a total of 2415 deliveries in 2010 and 1944 in 2012. GDM was diagnosed in 108 women in 2010 (4,5%) and 107 in 2012 (5,5%) ($p = 0,118$). Between the two groups, we found no difference in the frequency of dystocic birth (47,2% vs 56,1%; $p = 0,194$) nor in the Apgar score inferior to 5 ($p = 0.793$) nor in the medium weight at birth ($p = 0,932$). There were fewer new-borns weighing more than 4000 grams in the 2012 than 2010, (6 vs 9, respectively). Postpartum screening rate was similar among both groups.

For the subpopulation with a negative GDM screening, $n = 2307$ in 2010 and $n = 1837$ in 2012, the frequency of dystocic birth was 48,3% and 46,9% ($p = 0,383$), respectively. Considering the frequency of newborns weighing more than 4000 grams there was no statistically significant difference between the 2 groups.

Conclusion

In our population, the implementation of the current screening method did not affect the prevalence of GDM. The evaluated maternal, fetal and perinatal outcomes were similar between 2010 and 2012.

Key words: Gestacional diabetes mellitus, screnning, adverse maternal, fetal and perinatal outcome

Presenter name: Patrícia Isabel Pereira Silva

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SVEUS – DEVELOPMENT OF VALUE BASED MONITORING AND REIMBURSEMENT SYSTEMS FOR MATERNITY CARE IN SWEDEN

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Introduction

Most countries see rising costs of health care and variation in health care quality. Improved transparency and reimbursement through value based monitoring and reimbursement have been proposed as a potential solution. The objectives of this research and development project are to analyse differences in the value of maternity care provision between providers and based on this analysis design a value based monitoring and reimbursement system for maternity care.

Materials and Method

In 2013, the research and development project Sveus, a collaboration between 7 Swedish county councils in the development of value based monitoring and reimbursement systems for maternity care. Payers, providers, professional associations and quality registries collaborate to define the scope of the care episode as well as to define relevant key performance indicators. Identification of important indicators for measuring value (care processes, resource use and health outcomes) and patient characteristics (casemix-factors) influencing outcomes, resource use and processes are based on clinical expertise, existing research and statistical analysis of a comprehensive research database. Based on data from both regional and national registries of administrative and clinical nature, statistical prediction models are used to develop algorithms for casemix-adjustment of comparisons between health care providers and for casemix-adjusted reimbursement.

Results

A maternity care episode starting at first prenatal appointment and ending at 12 weeks after delivery was identified. Postpartum complications up until one year postpartum were considered. A large number of indicators was identified, including baseline characteristics (e.g. age, parity, comorbidity), health outcomes (e.g. fetal and maternal complications), resource use (e.g. length of stay, hospitalizations and visits during pregnancy and after delivery, use of neonatal care) as well as other process measures (e.g. mode of delivery, induction, pain relief). A bundled payment for the episode of care from admission for delivery until 12 weeks postpartum has been proposed, covering all delivery care, as well as delivery-related readmissions and visits. The bundle will be adjusted based on baseline characteristics but will not differ depending on mode of delivery.

Conclusion

Development of value-based systems for monitoring and reimbursing maternity care can be designed through collaboration between the different stakeholders involved in maternity care. To be able to measure value is important to capture the entire continuum of care – both pregnancy, delivery and postpartum care.

Key words: Value based maternity care

Presenter name: I Amer-Wåhlin

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Vaginal delivery of breech presentation - a review of 10 years

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Introduction

Breech presentation represents 3-4% of all babies at term. Compared with a cephalic presentation, these fetus have greater risk of asphyxia and of traumatic injury during labor. Cesarean section (CS) has been suggested as a way of reducing both.

However, persistent breech presentation is already associated with poorer perinatal outcomes which have nothing to do with the mode of delivery.

Since the publication of the Term Breech Trial in 2000, most experts begin to recommend planned CS over vaginal breech birth (VBB). As the study has benn criticized, most recent works and several international societies suggest that a planned VBB in an experienced center with apllication of strict criteria can be safely offered to women.

In this work we describe all VBB in our institution during a period of 10 years.

Materials and Method

We conducted a prospective study of all breech vaginal delivery in single pregnancies from 2005 to 2014 in Dr. Alfredo da Costa maternity.

Results

During the 10 year period we had a total of 50 902 births. Of the 2 181 breech deliveries (4,28%), we performed 2140 CS (4,20%) and only 41 (0,08%) VBB.

In the VBB, the mothers had a mean age of 29,8 years (SD±5y), 10 were nulliparous (24,3%) and 31 were multiparous (75,7%). All the deliveries were spontaneous with an average gestational age of 38,2 weeks (min 37 and max 40).

No cases of abruption placenta or umbilical cord prolapse occurred. There were 3 cases (7,3%) resolved with piper forceps. In 32 (78%) mothers a mediolateral episiotomy was performed with no perineal lacerations (grade 3 and 4) registered.

The mean weight of the babies was 2841,1g (SD±402,5g; min 1885g, max 3630g) with median Apgar scores of 9 (min 1, max 10) and 10 (min 5, max 10) at 1 and 5 minute of life, respectively. Four babies (9,8%) were admitted in the neonatal intensive care unit (one due to braquial plexus injury, 2 due to infectious risk and 1 due to severe neonatal asphyxia with need of therapeutic hypothermia) and all were discharged with no sequelae noticed within 2, 4, 6 and 24 days, respectively. Two were diagnosed with braquial plexus palsy (4,9%), one of which had a fracture of the clavicle (2,4%) and a cervical traumatic injury, and in another a congenital hip dysplasia (2,4%) was detected.

All mothers were discharged within the normal period of recovery time with no complications described.

Conclusion

Vaginal breech deliveries will continue to occur, even if CS is the routine practice for breech presentation, because obstetricians willcontinue to be confronted with precipitous delivery. Moreover, the international societies have been replacing their restrictive breech guidelines with new versions supporting the selective VBB.

Therefore it is essential the selection of a population that meet the exequibility criteria for a VBB, and the training and maintenance of the skillsrelated to this mode of delivery, so that a VBB can be a safe option for some women.

In our study all mothers had global good outcomes. There were four admissions in the neonatal intensive care unit. The only serious case was a severe neonatal asphyxia with a fracture of the clavicle, a braquial plexus palsy, a cervical traumatic injury and a coagulopathy; with no apparent sequelae at discharge.

It is our conviction that with an experienced team, a good selection of cases and adequate preparation of women who wish a VBB, this mode of delivery can be a viable choice.

Key words: vaginal breech birth

Presenter name: Nisa Félix

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THE INFLUENCE ON THE PERINEAL OUTCOME OF THE MATERNAL POSITION DURING 2ND STAGE OF LABOUR

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Introduction

Vaginal deliveries can lead to significant perineal trauma. The active management (manual perineal protection, perineal massage, etc.) or passive management, respecting the physiological process of the birth (hands off, women's own selection for birth position) are the actions that the professionals need to decide in order to reduce the birth related perineal trauma.

Recent studies relate factors as the use of invasive techniques (episiotomy), maternal position during the second stage of labour, non-invasive techniques (application of warm compresses) with variation on perineal injury degree.

A review of Cochrane Library, "Positions in the second stage of labor for women without epidural" (2012), notes that vertical positions decrease the rate of episiotomies. Although this review states that the evidence is not conclusive regarding the influence of maternal position during second stage of labor on perineal trauma, our aim is to analyze this in our maternity unit.

Materials and Method

It has been conducted a retrospective observational study. We have collected the maternal position at second stage of labour of all women that had a normal vaginal delivery during 2014 in the maternity unit of OSI Debabarena. The positions were grouped in upright positions (all-fours, squatting, sitting) and supine positions (semi-recumbent, lateral and recumbent positions) according to the classification made in the Cochrane review cited before.

Results

From a total of 618 women attended in 2014, 70% (n = 437) had a vaginal delivery, of which, 387 delivered in a supine position (88.55%) and 50 (11.44%) in upright position.

In all vertical births, the rate of intact perineum was obtained in 34.4% of deliveries; 1ST degree tear in 34%; 2º degree in 30% and 3rd degree in 2%. The episiotomy was performed in 1 case (2,12%). In supine positions, intact perineum was given in 28,68% of births; 1st degree in 28.24%; 2ns degree in 35,14%; 3rd degree in 0.52% and the episiotomy was performed in 6.78% of all deliveries.

According to the results obtained in the study, the influence of different maternal positions on perineal outcome is not statistically significant.

Conclusion

The maternal position during the 2nd stage is not associated with the grade of perineal tears but it is confirmed that contribute to the reduction of episiotomy rates.

Key words: Episiotomy, maternal position, second stage, tears

Presenter name: Julene Legarretaetxebarria

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EXTERNAL CEPHALIC VERSION: IS IT A SAFE PROCEDURE TO REDUCE ELECTIVE CESAREAN RATES?

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Introduction

External cephalic version (ECV) is the procedure by which a fetus in breech presentation is rotated applying manipulation techniques through the mother's abdomen to turn it in either a forward or backward somersault in order to achieve a vertex presentation. The goal of ECV is to increase the proportion of vertex presentations among fetuses that were formerly in the breech position near term. Once a vertex presentation is achieved, the chances for a vaginal delivery increase. During the last decade ECV has been questioned due to the possible complications that can appear during the procedure, tending to raise the rate of elective cesarean deliveries.

The aim of this study is to analyze the maternal, fetal, technical and perinatal variables for patients in which ECV were done. In addition, we analyze the factors associated with successful ECV in our hospital.

Materials and Method

We performed a prospective study in 209 pregnant women with fetuses in breech presentation in which we carried out an attempt of ECV, between March 2011 and December 2014. Inclusion criteria were singleton pregnancies, breech presentation, gestational age superior to 36 weeks and absence of absolute contraindications. All the ECVs were performed under tocolysis. Exclusion criteria were: presence of any indication for elective cesarean delivery, third-trimester bleeding, nonreassuring cardiotocogram, oligohydramnios, intrauterine growth restriction, placental disease, major fetal anomalies or fetal death, uterine malformations, coagulation disorders, multiple pregnancy, deflexion of the fetal head, uterine scar, nuchal cord or labor.

Maternal variables included were: maternal age, gestational age, parity, ethnicity and body mass index (BMI). Fetal variables included were: estimated fetal weight (grams), percentage of frank breech and dorsum presentation. Technical variables included were: percentage of forward/backward rotation, type of tocolysis, and time until birth. Perinatal variables included were: gestational age at birth, neonatal weight, fetal sex and the cord blood pH. We described the rate of success in ECV, the percentage of reversion, the percentage women who gave birth vaginally and the complications that appear during the procedure.

In order to analyze the factors for predicting successful ECV, patients were classified into two groups: successful (SECV) or failed (FECV). All variables were evaluated as part of the 2 mentioned groups and statistical test were performed. Data analyses were performed using the IBM SPSS Statistics for Windows version 21 (IBM Corp., Armonk, New York, USA) using default settings. Logistic regression analysis was performed with successful ECV as dependent variable, in order to evaluate importance of the different variables. Differences between groups were considered statistically significant at $p<0.05$

Results

We performed 213 attempts of ECV in 209 pregnant women, which meant that in 4 (1.9 %) patients, a second attempt was carried out after failure of ECV. We had two losses of follow-up in pregnant women that gave birth in another hospital after ECV. The rate of successful ECV in our center was 58.9 %. Reversion rate was 3.8 %. We achieve a total of 61.2 % cephalic presentations.

Maternal variables show the following distribution: mean maternal age was 33 years; mean gestational age at the moment of ECV was 37 weeks. Forty-two percent of women were nulliparous versus 58 % of multiparous. Seventy-six percent were Caucasian, 15% Latin-American and 10% from other ethnic groups. Mean body mass index (BMI) was 23%. Fetal variables were: mean estimated fetal weigh 2733 g, frank breech presentation 81 %. Fifty-two percent were left dorsum presentation versus 40 % right dorsum. According to technical variables: forward roll technique was applied in 96% of ECV versus 4 % of back-flip technique. Thirty-six percent of ECVs were performed under tocolisis with Ritodrine versus 62 % in which the tocolytic agent was Tractocile. Perinatal variables show the following distribution: mean gestational age at birth was 39 weeks, mean time of latency until birth 15 days, mean newborn weight was 2720 g. Mean ph at birth was 7.26.

Among the group with successful ECV, 88 % of women gave birth vaginally versus 12 % cases in which gestation was ended by cesarean section. The most frequent reasons for cesarean birth were failure to progress in labour, fetal distress and cephalopelvic disproportion (CPD). In the group of failed ECV, 16 %

of women gave birth vaginally versus 84 % cases in which a cesarean section was performed. The most frequent reason for cesarean birth was fetal malpresentation.

Patients were classified according to whether the ECV was successful (SECV) or failed (FECV). The percentage of multiparous women was significantly higher in SECV group (67 % vs 33 %, p= 0.043). Gestational age at birth was higher in the SECV group when compared to FECV group (39 vs 38 weeks, p< 0.01). Time of latency until birth was significantly longer in the SECV group (18 vs 11 days, p<0.01) No statistical differences were found in maternal BMI, percentage of frank breech presentation, dorsum presentation, gestational age at the moment of ECV, estimated fetal weight, fetal sex and newborn weight between the two groups.

We performed a logistic regression analysis to identify the relationship between independent prognostic variables (gestational age, dorsum presentation, anterior placenta, estimated fetal weight, maternal BMI, parity and use of tocolisis) and success of the ECV. We carried out this analysis in two steps. In the first step, we obtained the individual OR for each independent variable (univariate analysis) and secondly, using the “back step: likehood ratio”, we analyze the weighted value of the OR of each independent variable with the rest (multivariate analysis). After this multivariate analysis, we observe that the only independent variable that influences in the success of ECV in our work was the use of tocolisis with ritodrine towards tractocile with an OR of 2,7 (1,06-6,86, CI 95, p 0.037). This means that, when we use Ritodrine as tocoliticum, we have almost three times more possibility of obtaining a successful ECV.

We register five minor complications, two cases of premature rupture of membranes and three women who went into labour immediately after ECV. No major complications were recorded.

Conclusion

Cephalic external version is a combination of maneuvers that externally rotates the fetus from a breech presentation to a vertex presentation with the objective of offering pregnant woman a safe vaginal delivery. Several national organizations recommend ECV such as the Royal College of Obstetricians and Gynaecologists (RCOG), the American College of Obstetrician and Gynecologist (ACOG) and the Spanish Society of Obstrics and Gynecologist (SEGO) in centers which are provided of all the necessary facilities in case any complication appears during the procedure.

ACOG recommends offering ECV to women with breech fetuses who have no contraindications to the procedure and have completed 36 weeks of gestation in order to avoid complications derived from prematurity in case an urgent cesarean section needs to be performed. In our study, 88 % of ECV were done after completing 36 weeks of gestation besides 12 % that were performed before 36 weeks, finding no statistical differences in rate of vaginal delivery or complications for the newborns between both groups.

There is no general consensus about contraindications to ECV. Based on expert opinion, the following settings are absolute contraindications for ECV: Indications for cesarean delivery (eg, placenta previa), anhidramnios or premature rupture of membranes, nonreassuring fetal monitoring test results, significant fetal or uterine anomalies, abruptio placentae, placental anomalies and multiple gestation. Numerous relative contraindications have been suggested for ECV: previous cesarean section, intrauterine growth restriction, oligohydramnios, maternal hypertension, obesity, etc.

A series of maternal, obstetrical and fetal conditions have been described as limiting factors: nulliparity, anterior placenta, oligohydramnios, small for gestational age, posterior dorsum of the fetus, etc. On the other hand, some other factors appear to increase the rate of successful ECV: posterior placenta, frank breech presentation, amniotic fluid index (AFI) > 10 and multiparity. According to the multivariate analysis carried out in our study, no statistical differences were found between gestational age, position of fetal dorsum, anterior location of the placenta, estimated fetal weight, maternal BMI, parity and the failure or success of ECV. We only found statistical difference between the use of ritodrine towards tractocile, achieving almost three times more probability of successful ECV with the use of ritodrine (p<0.05).

The administration of tocolytic agents before ECV has been associated with an increase in the rate of successful ECV. No drug or regimen was clearly superior to another according to the latest published studies. In our experience, we observe an increase in the rate of successful ECV when ritodrine is used as tocolytic.

The main technique applied was the Forward Roll in 96 % of our patients. If ECV is not achieved in the first attempt, we can let the patient rest and make a second attempt after a few minutes. If Forward Roll technique is not successful after more than two attempts, we can try Back-Flip technique rotating the fetus over his back in the opposite direction.

The effectiveness of the technique relies in the ability of the operator to increase the proportion of fetuses in cephalic presentation at the onset of labor and decrease the frequency of cesarean delivery. This concurs with the results in our study where 88 % of deliveries were vaginal after successful ECV towards 84 % of cesarean deliveries after failed attempt of ECV.

The main risks associated with ECV are premature rupture of membranes and the beginning of labor. Severe complications have been described in association with ECV in a very low percentage: abruptio placentae, cord prolapsed and vaginal bleeding which can required the realization of emergency cesarean delivery. In our study, no major fetal or maternal complications were recorded during the performance of ECV, only 5 minor complications occurred, two cases of rupture of membranes post-ECV and the beginning of labour in three woman two hours after ECV. Globally, the small risk of procedure-related complications seems to be lower than the risk associated with breech birth or elective cesarean delivery.

External cephalic version is a safe and cost-effective procedure when performed by qualified and well-trained professionals in centers with a specific protocol and which are provided with all the necessary facilities in case an emergency cesarean delivery needs to be done.

According to our study, we can affirm that vaginal delivery occurs in a high percentage of patients who underwent ECV with excellent perinatal results. Therefore, we recommend the realization of ECV considering the small risk for the mother and the baby in comparison to breech presentation and elective cesarean deliveries.

Key words: External cephalic version, cesarean rate, successful ECV, vaginal delivery after ECV

Presenter name: Duna Trobo

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Isoimmunization in Rh+ pregnant

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Introduction

Haemolytic disease of fetus and newborn (HDFN) is a rare complication in Rh positive pregnant, usually mild.

Authors present a rare case of severe HDFN in a Rh positive pregnant.

Materials and Method

Patient's file

Results

34 years old, 2nd pregnancy, blood group A Rh positive. Healthy spouse, O Rh negative.

1st trimester ultrasound (US) normal. Chorionic villus sample performed due to positive combined chromosomopathies screening. Caryotype: 46,XX.

1st trimester analyses: negative indirect antiglobulin test (IAT); immune to rubella and CMV, not immune to toxoplasma; other serologies negative.

Normal morphological US at 20 weeks.

At 24th week patient presented a positive IAT with no specific antibody (Ab) identification.

Patient was referenced to our hospital at 25 weeks for suspicion of fetal death, after a decreased perception of fetal movements and sense of uterine contractility in the last week. Fetal death was confirmed and fetus was hydroptic.

Labour was induced; an eutocic birth occurred, resulting in a dead female fetus, weighting 1180g.

Patient's blood count, biochemistry and coagulation study with no significant alterations.

Serologic tests for Citomegalovírus, Toxoplasmosis, Herpes, Parvovirus, Coxsackie did not show recent infection. Negative vaginal swabs.

Fetomaternal haemorrhage was excluded by flow cytometry performed at day 5 and 30 after expulsion.

The IAT was repeated and confirmed to be positive. An Ab to an high incidence antigen was suspected and a new sample asked to confirm results.

Patient's and father's erythrocytes were phenotyped, revealing that mother presented a very rare (kpa+,kpb-) phenotype and father was homozygous for Kpb. Additional immunohaematologic study allowed to identify an anti-kpb with a titer 1:512.

Due to the rarity of the case, 2 autologous erythrocytes units were collected from patient and cryopreserved for eventual future need.

Placenta anatomo-pathological examination showed an enlarged placenta, greater than 95th percentil and excluded infection; erythroblasts were seen in villus vessels. Fetal autopsy concluded fetal hydrops and excluded malformations.

Conclusion

We support the hipothesis that anti-Kp(b) alloimmunization would have occurred during 1st pregnancy. Antibody titre would have decreased in the following 3 years, resulting in a falsely negative IAT Ab screening in 1st trimester of 2nd pregnancy. After villous sampling an anamnestic response probably occurred increasing the Ab titre and giving a positive Ab screen in 2nd trimester.

Kpa and Kpa are antithetic antigens belonging to the Kell blood system. Kpa homozigosity is very rare (<2% in Caucasians) and Anti-Kp(b) is a rare clinically significant Ab associated to severe HDFN.

In a future pregnancy, serial determinations of middle cerebral artery peak velocity by Doppler ultrasound would be necessary to predict fetal anemia. Intrauterine transfusion with thawed, washed and irradiated mother's erythrocyte concentrates is a therapeutic option to avoid fetal hydrops.

Key words: Isoimmunization, anti-Kp(b), Haemolytic disease of fetus and newborn (HDFN)

Presenter name: Sofia Rodrigues

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FETAL HYPOPLASIC AORTIC ARCH – NON-SPECIFIC PRÉ-NATAL SYMPTOMS AND SIGNS

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Introduction

The aortic arch hypoplasia is an uncommon cardiac malformation in fetal life, due to the adaptive permeability of ductus arteriosus and therefore their functional effects become patent after birth with its the closure. In fetal echocardiogram imaging the aortic arch can be challenging, and it can be difficult to distinguish ductal arch from aortic arch. Nowadays it is recommended for screening obstetric fetal anomalies the plan that includes identification of a 4-chamber view, the outflow tracts, and three-vessels and trachea view all of which can appear to be normal to the ultrasonographer in fetuses with this pathology. A diagnostic clue is the combination of a low aortopulmonary diameter ratio and absence of a ventricular size discrepancy in combination with an almost always present ventricular septal defect in relation with the outflow tract, more frequently with bad alignment septal posterior deviation of the infundibular septum.

Materials and Method

To present this clinical case was consulted process of pregnant and literature on the subject.

Results

A 29 years old pregnant, primigest, blood type O Rh positive, monitored her pregnancy in primary health care. Analytical study during pregnancy was normal. In the 1st trimester ultrasound had a measure of nuchal translucency upper neck to the 99th percentile, but the mother refused invasive prenatal testing and the follow-up of pregnancy in tertiary health care. The 2nd and 3rd trimester ultrasounds did not show any anomalies. The patient is admitted at the emergency room at 32 weeks and 2 days with a lack of perception of fetal movement with 10 hours of evolution. In cardiotocography was identified reduced variability, without reactivity and without uterine contractility registration. Echographically the fetus is in cephalic presentation, an anterior location of placenta, with normal amniotic fluid, weight estimation was 2027g, umbilical artery doppler with absent diastolic flow and IP and IR middle cerebral artery below the 5th percentile, without visualization of fetal movements. Was administered a dose of dexamethasone. It was decided cesarean section for suspected fetal distress, after discussion with the parents and neonatologist. The newborn male with 1805g weight, Apgar score at 1, 5 and 10 minutes of 4, 6, 7, respectively, with the cord blood gasometry revealing mixed acidosis. He was hospitalized in neonatal intensive care. After study in neonatology were diagnosed hypoplasic arch, transverse portion, and perimembranous interventricular communication with subsequent surgical correction at 15 days of life, and with normal karyotype and negative for deletion 22q11.2.

Conclusion

Nonspecific signs such as reduced variability without reactivity in cardiotocography or fluxometric anomalies with absence of fetal movements were prenatal signs of hypoplasic aortic arch, which have been diagnosed in the postnatal period.

Key words: Fetal Hypoplasic Aortic Arch

Presenter name: Rita Martins

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Upright births and perineal trauma – one year's experience

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Introduction

The perineal trauma - episiotomy or tear, increases morbility in puerperium that can go from mild discomfort to severe pain with impact on the establishment of breastfeeding and mother -baby relationship and may also include bleeding, infection, urinary or intestinal incontinence and may at long term have a significant impact on women's quality of life. The literature supports a restrictive practice of episiotomy and supports the adoption of practices in childbirth to minimize perineal trauma.

The upright position at birth is advocated as a more physiological position, which facilitates the second stage of delivery, leads to more effective pushing efforts, and decreasing pain in childbirth, however this position can lead to greater difficulty in acessing and support the perineum at second stage. Some literature even relates the vertical positioning for delivery with a lower incidence of episiotomy but with greater incidence of tears .

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Materials and Method

These study has the aim of analyze the perineal trauma occurred in womens with eutocic births at term, in 2014 and related it to variables such as parity, birth position, professional who performed the delivery and newborn weight at birth among others

It has been performed a retrospective study of all at term eutocic births occurred in 2014. Descriptive and inferencial statistics were analysed for variables of interest, and were generated to explore possible relationships between perineal outcomes, birth position, and type of professional who assists delivery..

Results

From the first findings the rate of intact perineum (39%) and tears grade1(32%) in upright positions is higher than in litotomic position (33% and 28% respectively). The proportion of tears grade 2 and 3 is similar in the two groups (14% and < 0,1%, respectively) and there were no cases of tears grade 4. Episiotomy was present in 25% of deliveries in litotomic position versus 15% of deliveries in upright position.

It seems to exist an association between the type of professional who assists the delivery and the rate of episiotomy and intact perineum. Data analyse is still on progresso.

Conclusion

In these sample the vertical positioning in the second stage of labor seems to have a protective effect on the perineum. More data should be gathered in order to study the relation between different upright positions and perineal trauma.

The probability of having an episiotomy done is higher in deliverys supported by doctors. These findings allow us to say that professionals should have more training on the prevention of perineal trauma and techniques of perineum protection.

Key words: birth position; episiotomy ; tears; perineal outcomes , perineal trauma

Presenter name: C.Sousa

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BREECH PRESENTATION: CESAREAN SECTION VERSUS VAGINAL DELIVERY

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Introduction

Breech presentation describes the fetus whose buttocks are adjacent to the birth canal. The incidence of breech presentation decreases with increasing gestational age, so it occurs in 3–4% of cases of term singleton pregnancies, in 10–12% of preterm singleton fetuses, and in 20% of pregnancies at or before 28 weeks of gestation. Spontaneous version may occur at any time before delivery, even after 40 weeks of gestation.

Breech presentation is associated with higher prenatal morbidity and mortality, mostly related to the mode of delivery, and the higher incidence of congenital anomalies.

The aim of this study is to compare maternal and neonatal outcomes of the vaginal delivery versus cesarean delivery for the breech presentation.

Materials and Method

We conducted a literature search through the databases Pubmed and UpToDate, using as key words “breech”, “presentation” and “delivery”, to select studies published between 2005 and 2015. Our search provided as main outcomes two retrospective studies, one systematic review, one descriptive review, one guideline and two observational prospective studies.

Results

Vaginal Breech delivery: There are three main types of breech presentation. When the frank breech position and complete breech position occurs, an easy birth usually is possible, but incomplete breech position increased risk of difficulty delivering the shoulders or head.

Some criteria for a vaginal breech delivery have been described: no contraindication to vaginal birth, no prior caesarean deliveries, no fetal anomaly, estimated fetal weight at least 2000 to 2500 g but not higher than 4000 g, gestational age ≥36 weeks, no hyperextension of the fetal head, frank or complete breech presentation, spontaneous labor, staff skilled in breech delivery and immediate availability of facilities for safe emergency cesarean delivery.

Labour management includes keeping the membranes intact because their rupture is related with an increased risk of cord prolapse and continuous electronic fetal heart rate monitoring is recommended.

Caesarean Breech delivery: Planned caesarean delivery for breech presentation is suggested between 39 and 41 weeks of gestation. Before the surgery, the presentation should be checked in case spontaneous version has occurred.

Fetal extraction is difficult in 1 to 2 % of caesarean deliveries, so surgical preparation for caesarean delivery should include anticipating potential difficulties with fetal extraction, having a plan for managing them if they occur. Causes include: impacted fetal head, floating fetal head, extremely low birth weight, breech or transverse fetal lie, low anterior placenta and uterine constriction ring.

To avoid the traumatic fetal extraction, the abdominal and uterine incisions should be sufficiently large and a good uterine relaxation is needed.

Conclusion

1. Incomplete breech presentation is a contraindication for a breech vaginal delivery.
2. Vaginal delivery of 1,000-1,500 g babies presenting as breech is associated with increased neonatal mortality compared with caesarean delivery.
3. There may be clinical situations in which the risks of caesarean to the mother, or the mother's desire to avoid caesarean delivery, may outweigh the risks of vaginal birth to the baby.
4. Planned caesarean delivery is suggested for persistent breech presentation.

Key words: "breech", "presentation", "delivery"

Presenter name: BELÉN SHAHROUR ROMERA

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Painkillers in Pregnancy - More than we've prescribed for?

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Introduction

Certain prostaglandin-inhibiting analgesics are used in pregnancy and childbirth and are generally regarded as harmless to both mother and child. However, prostaglandins up-regulate DNA methyltransferases (DNMTs) which mediate methylation in germ cells during development. Increasingly, in utero exposures are recognised as moderators of long-term health in offspring, mediated via epigenetic changes. Thus, it was hypothesised that maternal exposure to prostaglandin-inhibiting analgesics would inhibit the production of DNMTs in the fetal gonad, which may impact upon the health of offspring in the long-term.

Materials and Method

Investigating if maternal exposure to indomethacin (0.8mg/kg/day) or paracetamol (350mg/kg/day or 60mg/kg/day) reduced DNMT3a or DNMT3b expression in fetal germ cells using immunohistochemistry and semi-quantitative analysis of intensity of immunostaining from e15.5-e21.5 in Wistar rats.

Results

Reductions in DNMT3a and DNMT3b immunostaining were seen in Indomethacin- and paracetamol-exposed fetuses in the rat fetal gonad. DNMT3a immunostaining was particularly reduced in fetal ovaries. Immunonegative germ cells were significantly increased following maternal indomethacin or paracetamol exposure ($p \leq 0.0001$ and $p \leq 0.001$, respectively, versus controls). Indomethacin dosing was within a therapeutic range, but initial paracetamol dosing was much higher than in humans. Following maternal exposure to therapeutic paracetamol dosing, DNMT3a immunostaining was not significantly reduced in fetal ovaries.

Conclusion

Maternal exposure to prostaglandin-inhibiting analgesics results in a reduction in DNMT3a and DNMT3b immunostaining in fetal gonads. This could result in aberrant germ cell methylation, which may impact the long-term health of the offspring. This study provides a basis for determining if similar effects are observed in the human fetal gonad.

Key words: Analgesics, Epigenetics, Developmental toxicity

Presenter name: Kerrie Stevenson

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Comparison of beat-to-beat signals with 4 Hz sampling on computer analysis of cardiotocograms

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Introduction

Some commercially available cardiotocographic (CTG) monitors provide fetal heart rate (FHR) signals as beat-to-beat (BTB) or alternatively at a fixed sampling rate. The aim of this study was to analyse the effect of these two different sampling modes of the same signal on the results of computer analysis of the CTG.

Materials and Method

Internal FHR signals were acquired during the last hour of labour in 27 singleton term cephalic pregnancies, using the STAN S31® fetal monitor (Neoventa, Gothemburg, Sweden). BTB and 4Hz sampling outputs of the monitor were compared using the Omniview-SisPorto® system for computer analysis of CTGs (Speculum, Lisbon, Portugal). The following parameters were analysed: signal loss, signal quality, baseline, accelerations, decelerations, percentage of abnormal short-term variability (%aSTV) and long-term variability (%aLTV), average short-term variability (aSTV) and LTV (aLTV). Statistical inference was performed using the Spearman correlation coefficient, 95% nonparametric confidence intervals, Wilcoxon and McNemar statistical tests, setting significance at 0.05.

Results

Comparing BTB with 4 Hz sampling, median signal quality (95 versus 96), number of accelerations (5 versus 7) and %aSTV (31 versus 39) were significantly lower in the former. On the other hand, median aSTV was significantly higher in BTB signals (3.1 versus 2.3). There were no relevant differences between BTB and 4 Hz sampling in the remaining parameters.

Conclusion

Different sampling modes can affect the parameters of computer analysis of CTGs that are based on STV analysis, with an impact on segmental baseline estimation and the corresponding quantifications of accelerations and decelerations, which can ultimately affect clinical decision.

Key words: Fetal heart rate, Fetal monitoring, Cardiotocography, Signal processing, Computer analysis, Electrocardiography.

Presenter name: Joana Chaves

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ACTIVE MANAGEMENT OF THIRD STAGE OF LABOR: INTRAMUSCULAR OR INTRAVENOUS OXYTOCIN

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Introduction

The third stage of labour (TSL) refers to the period between the birth of the baby and complete expulsion of the placenta. Blood loss during this period and immediately thereafter depends on how quickly the placenta separates from the uterine wall.

Active management of the third stage of labor (AMTSL) can help to prevent PPH and involves interventions that facilitate uterine contraction and expulsion of the placenta. Oxytocin is the gold standard uterotonic drug used in AMTSL. Compared with expectant management, AMTSL significantly reduced the risk of PPH and severe PPH by 66%. Obstetric texts advocate the use of oxytocin, either intramuscularly or by dilute intravenous infusion, and warn against the use of intravenous bolus oxytocin, for fears of maternal haemodynamic consequences. Yet this safety concern was not based on rigorous scientific evidence but mainly derived from isolated cases and contexts which are not applicable to the majority of women undergoing low-risk vaginal birth

Materials and Method

Search of current evidence in databases such as COCHRANE, PUBMED OR UPTODATE with keywords “Third stage of labor” AND “Uterotonics” OR “Oxytocin”.

Results

A prospective randomized study with eligible participants who were recruited and randomly allocated into four groups: The groups were given oxytocin intravenously or intramusculary at different moments of labor. This study showed that the duration of the TSL was shortest in the group receiving intravenous oxytocin after delivery of the fetal anterior shoulder. Postpartum blood loss, incidence of high postpartum blood loss (≥ 600 mL), and hemoglobin and hematocrit levels at admission and after delivery were similar in all groups. Moreover, any differences had no clinical impact, because the incidence of postpartum hemorrhage was similar in all groups. In summary, the present study found that the mode and timing of oxytocin administration did not have any significant effect on postpartum blood loss. Although intravenous administration—especially after delivery of the fetal head—might seem favorable, the observed effects were clinically insignificant and had no marked impact on postpartum blood loss. However, this study has some limitations and the results cannot be generalized and warrant verification by future studies among larger patient groups in different level health facilities.

A 2012 Cochrane Systematic Review shows that there was no evidence from randomized trials to evaluate the comparative benefits and risks of intramuscular and intravenous oxytocin. Randomized trials with adequate design and sample sizes are needed to assess whether the route of prophylactic oxytocin after vaginal birth affects maternal or infant outcomes. Such trials should be large enough to detect clinically important differences in major side effects reported in observational studies and also to consider the acceptability of the intervention to mothers and providers as important outcomes.

Another review shows that oxytocin given as an intravenous bolus is effective, but the safety of this route has been questioned due to reports of significant hypotension that may lead to cardiovascular collapse and death.

Conclusion

Administration of oxytocin to AMTSL appears to be a safe intervention for the prevention of PPH. However, there were no conclusive studies to determine what direction is safer, so we cannot make conclusions on this topic.

Key words: “Third stage of labor” AND “Uterotonics” OR “Oxytocin”.

Presenter name: ESTER ORTEGA PEREZ

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IS IT PERINATAL OUTCOME PREDICTABLE AFTER A SHOULDER DYSTOCIA?

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Introduction

This study analyses the prevalence of some of the risk factors classically associated with shoulder dystocia (SD) in order to determine if their presence can predict an adverse perinatal outcome.

Materials and Method

We recorded 45 shoulder dystocias (SD) among 5424 births that took place in Gregorio Marañón General University Hospital (Madrid) during 2013. After excluding 6 diabetic pregnant women and 1 breech delivery, 38 SD were included for data analysis.

We selected the following risk factors:

1. Previous delivery with SD (47% of our pregnant women had had previous deliveries)
2. Employed manoeuvres to solve the SD (primary manoeuvres or rotational methods)
3. Newborn's sex

We registered "adverse perinatal outcomes" and we divided our SD in two groups:

Group 1: SD with positive perinatal outcome

Group 2: SD with negative perinatal outcome (one or more of the following: newborn needing intubation, umbilical cord pH <7,20, Five-minutes Apgar score < 7, collar bone or humerus fracture and brachial plexus palsy)

We performed a descriptive and stadistic analysis of the presence of the selected risk factors in each group.

Results

Data of all deliveries with SD (38): 55% instrumental deliveries, 47% of all women included in the analysis had had previous deliveries and their mean age was 33 years old. 76% of all newborns weighted < 4000 grams and 66% did not need hospital admission. Mean gestational age was 39 weeks. 16 SD were included in group 1 and 22 SD were included in group 2. The most frequent adverse perinatal outcome was pH <7,20 (44%). When we compared perinatal outcomes and employed manoeuvres, significant differences were found in favour of primary (non rotational) manoeuvres (LR (3)=9,3; p=0.026). Complicated births with SD and dystocias classified as "severe dystocia" were more common in male than female newborns, although no significant difference was found between both groups (X2(1)=0,001; p=0.973).There were only two women (11%), among those with previous deliveries, with history of SD and collar bone fracture. Both of them were included in the adverse outcome's group.

Conclusion

Risk factors for SD are well known. However, it is yet not clear whether some of them can predict perinatal outcome.

We consider important to give priority to rotational methods in order to avoid an excessive traction of the fetal head.

We consider that history of SD in previous deliveries must lead to an exhaustive pregnancy monitoring, with special attention to delivery, that should take place in experienced hospitals. Recurrence was not frequent in the population included in our analysis. Therefore, we do not recommend routine cessarean delivery.

Simulation workshops and ongoing practice courses can be useful training methods for future obstetricians.

Key words: Shoulder dystocia; Perinatal outcome; Brachial plexus palsy;

Presenter name: Karla Ferreres García

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RISK FACTORS ASSOCIATED TO SHOULDER DYSTOCIA IN OUR POPULATION

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Introduction

Shoulder dystocia (SD) is one of the most dangerous delivery complications. The risk factors associated to SD has been thoroughly studied but none has demonstrated to be independently related to SD.

The aim of this study is to analyse the risk factors associated to SD in our population by comparing the differences between non-diabetic pregnant women with SD and those with non complicated deliveries.

Materials and Method

We recorded data from all deliveries that took place in General University Hospital "Gregorio Marañón" (Madrid) from January to December 2013. We studied the prevalence of classical risk factors for SD described in literature in order to determine if there existed association between them and SD in our population.

Risk factors included in this study were gestational age, newborn weight, instrumental delivery, parity, maternal age, induced labour and male newborn

Results

From January to December 2013, there were 5424 births in our hospital. A total of 45 SD were registered during this period. We excluded 6 diabetic pregnant women and one breech delivery

We analysed the presence of risk factors for SD in our population (normal vs. SD deliveries): Mean gestational age (38.6 vs. 39.6 weeks); mean newborn weight (3134 vs. 3745 grams); instrumental delivery (17.4% vs. 55%); multiparity (64% vs. 47%); mean maternal age (32 vs. 33 years); induced labour (21% vs. 37%); male newborns (49% vs. 55%).

The following risk factors were more common in the SD group: induced labour, instrumental delivery, multiparity and newborn weight and sex. Maternal age and gestational age were similar in both groups.

Prolonged gestational age was the most common reason to induce labor (21%). 3% of induced labours were because of fetal macrosomy. The mean newborn's weight in SD deliveries overtake 3500 g and 24% weighted more than 4000 g. Among normal deliveries, this rate was 4%. The sex male rate was greater in SD deliveries. In normal deliveries, there were no differences between male and female sex. Although mean maternal age was similar in both groups, there were more women >35 years in SD group (30 vs 35%).

Conclusion

Classical risk factors for SD can also be seen in a high number of normal deliveries, so it is very difficult to predict a potential SD delivery by means of the risk factors analysed in this study. Therefore, we consider that routine cessarean delivery is not reasonable in their presence.

Giving that diagnosis of SD delivery is nowadays very subjective, we think more studies are needed in order to establish objective diagnosis criteria and to help determine which risk factors can be used to predict SD.

Key words: Shoulder dystocia; Perinatal outcome; Instrumental delivery; Induced labour; Macrosoma

Presenter name: Karla Ferreres

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Multiparous women in spontaneous labor within the hospital setting – A Midwives perspective

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Introduction

The uncomplicated multiparous woman in spontaneous labor is presumed 'low-risk'. 'Low-risk' refers to the healthy woman, with an uncomplicated pregnancy, giving birth, whereby minimal intervention is required. Planned hospital births are associated with high medical intervention rates and high complication rates. Such interventions include; electronic fetal monitoring (EFM), artificial rupture of membranes (ARM), oxytocin augmentation, epidural analgesia, episiotomy, vaginal operative delivery (VOD) and caesarean section (CS). Contrary to this assumption, it is argued that multiparous women in spontaneous labor within a hospital context remain a 'low-risk' entity. It is purported that interventions are limited, complications are uncommon and the care provided, is predominantly 'midwifery-led'.

Materials and Method

The National Maternity Hospital refers to 'The Robson Ten Group Classification System' (RTGCS) to audit all labor and delivery outcomes. Group 3 applies to all 'spontaneous, term, multiparous women with a single cephalic pregnancy'. A retrospective study was carried out on all women in Group 3, whom presented to the National Maternity Hospital (NMH), between the period 2005-2013, in terms of intervention rates and outcomes.

Continuous, one-to-one midwifery care is a fundamental aspect of the care philosophy in the NMH. Diagnosis of labor is made by a midwife. Upon diagnosis, an ARM is preformed should membranes remain intact, to assess liquor. Intermittent auscultation is used to monitor fetal wellbeing, once clear liquor is determined, unless otherwise indicated. Labor progress is assessed by a midwife after an initial 3 hour period and thereafter every 2 hours. Oxytocin is only considered if no progress has been made within each time-frame, following assessment by a medical colleague. The option of epidural analgesia remains at the discretion of each woman during her labor, unless clinically indicated otherwise.

Results

During the period, 2005-2013, Group 3 accounted for 23,643 women. 95.4% of whom, had an SVD. 3.4% had a VOD and 1.2% had a CS. 58% of these women had an ARM performed in labor. 59.8% had EFM. 32.5 % had epidural analgesia and 4.3% had oxytocin to augment labor. 81% delivered within a 4 hour period. 0.4% of the group had an estimated blood loss >1000mls. The episiotomy rate was 9.3% and the obstetrical anal sphincter injury (OASIS) rate was 0.9%. From a neonatal perspective, 0.3% of neonates had an Apgar score of <7 at 5 minutes of age and 0.2% had a Cord PH result of < 7.0.

Conclusion

Multiparous women in spontaneous labor (Group 3) having a planned hospital birth are deemed a low-risk entity. They are associated with low overall intervention rates, optimal outcomes and favorable experiences. Complications are uncommon and care provided is predominantly midwifery-led. Indeed, these findings arguably provide sufficient evidence to support the contentious view that 'normal birth' is actively promoted within contemporaneous hospital settings.

Key words: Low risk, Multiparous, Spontaneous labour, TGCS Group 3

Presenter name: Jill Dowling

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Vaginal bleeding at 33 weeks of gestation caused by massive hematomas located in the intermembraneous space of embryonic membranes

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Introduction

A case report of a 27-year-old pregnant woman at 33 weeks of gestation who presented with vaginal bleeding. The bleeding was caused by hematomas located in the intermembraneous space of embryonic membranes. The measurement of hematomas was 10 x 4 x 5 cm. No retroplacental hematoma was visualised. In addition to vaginal bleeding the patient was having light contractions and partial amniotic fluid leakage. The patient was hospitalised and treated with Betamethasone for fetal lung maturation in addition to the tocolytic therapy with Gynipral. In the appearance of chorioamnionitis signs on the fifth therapeutic day induction of labor was started.

Materials and Method

Clinical data from Tartu University Hospital and photos from private collection.

Results

A 27-year-old pregnant woman at 33 gestation week (gravida 3 para 2) with no therapeutically relevant family history and with no regular medication presented to Tartu University Hospital with vaginal bleeding, light contractions and partial amniotic fluid leakage. Until the date of hospitalisation, there were no medical complications of pregnancy.

The clinical setting was interpreted as a possible preterm labor and placental failure.

On physical examination, the patient appeared alert, oriented, cooperative and with no alteration of blood pressure value.

A digital cervical examination showed slightly bloody secrete. The amniotic fluid test was positive. Obstetric vaginal ultrasound (US) examination showed a massive hematoma located in the intermembraneous space of the embryonic membranes with the measurement of 10 x 4 x 5 cm. No retroplacental hematoma or detachment of the placenta was visualised. Amniotic sac fluid volume measurement revealed a polyhydramnion with the index of 26. Fetal morphology and flowmetry of the umbilical and middle cerebral arteries were normal. Transvaginal US revealed that internal os of the uterus was not covered by placenta.

In the laboratory tests: hemoglobin 111 g/l (ref 117-153 g/l), Hct 32 % (ref. 35-46%), platelets 169 E9/l (ref 145-390 E9/L), CRP 2 mg/l (ref <5mg/).

The patient received tocolytic therapy with Gynipral, tranexamic acid to prevent rebleeding and additionally was administered Betamethasone for fetal lung maturation. For the partial amniotic fluid leakage and risk of chorioamnionitis antibiotic treatment with Penicillin was added to medication.

The vaginal bleeding stopped for the third day and there were no contractions. On the fourth-day a decision to lower the dose of tocolytic treatment was ordered. Hemoglobin dropped to 84 g /l and minimal rise of CRP to 6 mg/ l. Antianaemic treatment was added to the regimen and fetal cardiotocography (CTG) was carried out every three hours. CTG-s showed no pathological signs. On the fifth day of treatment, CRP was elevated to 25 mg /l. Chorioamnionitis was suspected and therefore induction of labor was started with Misoprostol 50 mcg x 3 per day orally. Penicillin was replaced with Cefuroxime.

In the morning of the sixth day of treatment slightly yellow amniotic fluid broke out. CTG showed contractions with the interval of 2-3 min.

Vaginal examination showed shortened cervix of the uterus to 1.5 cm and internal os opened to 2 cm. The patient was transferred to the delivery department.

During the labor patient received paracervial blockage and epidural analgesia. Due to the secondary weakness of labor patient was given Oxytocin with rising doses. Premature newborn was born with good Apgar score of 8-9 and weighted 2800g. Baby was in good condition, crying, cardiac rhythm was regular and respiratory rate was 40 per minute. No external sign of the infection was discovered. Skin to skin contact after labour lasted for two hours.

The placenta and hematomas were born 10 minutes after the baby. There was no need for suturation. Total blood loss was 800 ml.

Placental Description:

Measurements- 23x14,5cm, thickness- 2 cm, weight- 297g (10 percentiles at GA 33 weeks 311g). Various sizes of hematomas and blood clots were attached to the placenta. All together hematomas formed a mass

of 11 x 7 x 3,5 cm, total weight of hematomas was 172g. Umbilical cord was attached to the edge of the placenta. Histologically there was minimal acute chorioamnionitis. Child to placental weight ratio was 9.4 (standard at 33 weeks is 4.9 to 7.1). The weight of the baby and the placenta were not proportional - the placenta was too small for the newborns' weight. No bacterial growth was laboratory discovered.

In the postpartum morning, the maternal hemoglobin was 88 g /l, CRP 46 mg / l. Patient had no subjective complaints. No blood transfusion was needed. Postpartum treatment with antibiotics continued until the end of hospital care. The patient left home on the seventh day after delivery with maternal hemoglobin 101 g/ l and CRP 7 mg / l. Antianaemic treatment continued 30 days until clinical check-up. The newborns' hemoglobin was 195 g / l, Hct 54%. Third-day bilirubin value rose up to 260 mmol / L. For the treatment of hyperbilirubinemia the newborn received phototherapy. Due to the risk of maternal infection the newborn received intravenous antibiotics with penicillin and gentamycin for 4 days. No other complications occurred during the hospitalisation.

Conclusion

A case of vaginal bleeding at 33 gestational week caused by massive hematomas located in the intermembraneous space of embryonic membranes. The patient was hospitalised and received tocolytic, glycocorticoid and antibiotic therapy. At the presence of chorioamnionitis induction of labor was started. Premature newborn with good Apgar score of 8-9 was born and weighted 2800g. The placenta and hematomas were born in 10 minutes. Total blood loss was 800 ml. Measurements of placenta were 23x14,5cm, thickness- 2 cm, weight- 297g (10 percentiles at GA 33 weeks 311g). Various sizes of hematomas and blood clots were attached to the placenta. All together hematomas formed a mass of 11 x 7 x 3,5 cm, total weight of hematomas was 172g. Child to placental weight ratio was 9.4 (standard at 33 weeks 4.9 to 7.1).

Postpartum maternal hemoglobin was 88 g /l, patient had no subjective complaints. No blood transfusion was needed. The newborns' hemoglobin was 195 g / l, Hct 54%. For the treatment of hyperbilirubinemia the newborn received phototherapy. No other complications occurred during the hospitalisation.

Key words: vaginal bleeding, massive hematomas, intermembraneous space, embryonic membranes, premature, placenta

Presenter name: Helen Reim

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Can we reduce cesarean rates in obese diabetic women?

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Introduction

Both obesity and gestational diabetes mellitus (GDM) are increasing in prevalence, being major and independent risk factors for cesarean delivery. Considering some previous studies, we hypothesized that in obese women with GDM, a reduced gestational weight gain (GWG), or even a gestational weight loss, would reduce the cesarean rates without increasing the risk of other unfavorable outcomes.

Materials and Method

Retrospective cohort study of Portuguese obese pregnant women with GDM who delivered between 2008 and 2012. GWG was calculated and classified considering the 2009 Institute of Medicine (IOM) recommendations for obese women. Women with GWG above IOM limits (>9Kg) were excluded. The assessed group was divided into three categories, according GWG: women who lost weight (GWG < 0Kg), women with GWG below IOM limits (0-5Kg), women with GWG within IOM limits (5-9kg). Maternal and neonatal outcomes were compared and adjusted odds ratios (aOR) calculated controlling for age, parity, prepregnancy body mass index, use of insulin, gestational age at delivery, and birthweight (when appropriated). Data were analyzed using STATA version 13.1.

Results

We obtained a study group of 1135 obese women with GDM who had a GWG within or below IOM limits. The majority had a GWG within IOM limits (n=635). Despite 44,2% (n=502) had a GWG below IOM limits, only 7,4% (n=84) of obese diabetic women in the study group lost weight. Obese diabetic women with adequate GWG (5-9kg) had a cesarean rate of 48,9%; while those with insufficient GWG (0-5kg) had a cesarean rate of 43,3% and those who lost weight (GWG < 0kg) had a cesarean rate of 27,2% (p=0,001). Thus, the higher the GWG, the higher the odds for cesarean section, even adjusting for birthweight and other confounding factors [aOR 1,08 (1,04-1,12); p0,05), preterm labor (8,3%; p>0,05), low Apgar score (0%; p>0,05), neonatal morbidities (11,7%; p>0,05) and admission to the intensive care unit (1,6%; p>0,05). But, either weight loss and GWG below IOM limits were associated with lower odds for macrosomia [aOR 0,46 (0,27-0,80); p=0,005] and of large for gestational age neonates [aOR 0,55 (0,37-0,82); p=0,003].

Conclusion

In obese women with GDM, a reduced GWG, especially with weight loss, leads to a marked reduction in cesarean section rates and in all its possible associated complications. Therefore, it is mandatory to make efforts to implement effective strategies (like diet adjustment and increased physical activity) to obtain the minimum GWG.

Key words: cesarean section; obesity; gestational diabetes; gestational weight gain; pregnancy outcomes

Presenter name: Inês Gante

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CAN WE PREDICT FAILED INDUCTION?

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Introduction

The major concerns associated with induction of labor (IOL) are the potential for increased risk of caesarean delivery.

The objective of this work is study the potential predictors of failed induction.

Materials and Method

This is a retrospective study on women admitted to labor induction in Hospital de Cascais from 1st Jan, 2011 to 31st Dec, 2013. The study population was divided into two groups: the study group, consisting of 65 women who were submitted to a caesarean section (CS) after diagnosis failed induction and the control group, composed for 151 women who delivered vaginally after IOL.

Induction was considered failed if it ended up in CS due to failure achieve to the active phase (6 cm and completely effaced) following the use of vaginal misoprostol or dinoprostone, selected by the attending obstetrician, and subsequently by intravenous oxytocin and amniotomy.

The selection criteria were singleton pregnancies beyond 37 weeks with vertex presentation, Bishop score less than 6, intact membranes and unscarred uterus. We excluded CS due to non reassuring fetal heart tracing.

Results

During the 3 years of the study 1013 IOL were preformed and 229 (22.6 %) ended in CS. The failed induction accounted for 28.3%.

The predominant indication for induction was post term pregnancy (93.8%). Comparing maternal and gestational age there were no difference. The majority of the population had no relevant medical issues (81.5%) but obesity and hypertension were more common in the study group, even though statistically irrelevant. Failed induction was higher in nulliparas (89.2% vs. 58.9%, p3500g. The duration of induction was significantly higher in the study group (31.0 vs. 19.6, $p<0.05$). Vaginal misoprostol was superior to vaginal dinoprostone, with fewer failures to achieve vaginal delivery. Maternal morbidity was more significant in the study group (7.7% vs. 4.0%, $p<0.05$). We didn´t found difference in neonatal morbidity.

Conclusion

In our study, we can conclude that the risk factors associated to failed IOL are nulliparity and duration of induction.

We think that the issue of "failed IOL" is relevant, and there is a need to define this entity and offer alternatives to cesarean delivery in the management of this group of women. Strategies for developing practice guidelines may help to prevent unwarranted case selection and help to reduce the current high operative delivery rates.

Key words: Failed induction, caesarean section

Presenter name: M. Mouraz

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SELECTIVE PELVIC ARTERY EMBOLIZATION IN THE MANAGEMENT OF SEVERE OBSTETRIC HEMORRHAGE. CASE SERIES STUDY.

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Introduction

Postpartum hemorrhage (PPH) is an important and unpredictable obstetrical emergency that represents the first cause of maternal death during delivery in developed countries. Selective pelvic artery embolization (PAE) is an interventional radiology technique that can be used as a conservative treatment in the management of this situation when the administration of uterotonic drugs is unsuccessful. The utilization of selective PAE may prevent from an excessive blood loss, reducing the need of transfusions and avoiding in most cases peripartum hysterectomy.

The aim of this study is to evaluate the utility and effectiveness of selective embolization of the pelvic artery in the management of severe PPH analyzing a series of cases treated in our center with this technique.

Materials and Method

We performed a retrospective descriptive study of 30.297 deliveries that took place in Hospital Universitario Gregorio Marañón between January 2009 and December 2013. Data from the patients and deliveries was collected from the data base of the department of obstetrics. During the study period, a total of 124 cases of uterine atony with severe hemorrhage were identified and 27 of these cases were referred to the Interventional Radiology Department for urgent angiography and selective PAE.

Maternal variables included were: age, parity, previous cesarean section and problems during pregnancy. Obstetrical variables included were: type of gestation (singleton/multiple), gestational age at delivery and type of delivery (vaginal delivery, cesarean delivery). Perinatal variable included was newborn weight and variables related with the treatment included were: indication for embolization, use of uterotonic drugs, surgical procedures before and after selective PAE, transfusion and number of units transfused and presence of disseminated intravascular coagulation (DIC). Additional information regarding the technique was also collected: exact artery embolized, laterality of the procedure, embolizant substance applied, arteriographic confirmation of bleeding by extravasation of the contrast and its absence after the procedure and complications during the technique.

Data analyses were performed using the IBM SPSS Statistics for Windows version 21 (IBM Corp., Armonk, New York, USA) using default settings.

Results

During the study period a total of 27 cases of uterine atony that required selective PAE were identified. The mean maternal age was 31 years. Twenty-two women were primiparous (81.5 %) and 5 multiparous women (18.5 %). In the group of multiparous women, 4 had previous cesarean delivery. Twenty-four cases (88.9%) were singleton pregnancies and 3 cases were multiple pregnancies (11.1 %). Twenty patients (74 %) gave birth at term (37 – 40 weeks of gestations). There were 7 cases (26 %) of premature delivery between 32 and 36 weeks. Ten patients (37 %) gave birth vaginally (5 eutocic, 5 forceps) and 17 patients (63 %) in which gestation was ended by cesarean section. The mean birth weight was 3076 g in singleton pregnancies and 1884 g in multiple pregnancies.

The most frequent indication for selective PAE was uterine atony in 19 patients (70.4 %). In this subgroup of patients, there were 6 cases (22.2 %) of haematoma of the birth canal, 2 cases (7.4%) of placenta accreta, 1 case (3.7 %) of previous myoma, 1 case (3.7 %) of perineal tear, 1 case (3.7 %) of vaginal laceration and 1 case (3.7 %) of renal angiomyolipoma.

In all cases the first maneuvers were uterine massage and exhaustive revision of the birth canal. The second step was the administration of uterotonic drugs such as oxytocin, methylergometrine and prostaglandins. The most common intervention to transfer patients who required selective PAE was the use of Bakri balloon. In our series there are 3 cases of peripartum hysterectomy, 2 cases after failure of selective PAE and 1 case in which embolization was rejected because of hemodynamic instability of the patient.

Regarding the technique, 45 arteries were embolized and there was one case in which embolization was rejected due to absence of extravasations of contrast in the angiography. In the 19 cases of uterine atony, the artery which was embolized in most cases was the uterine artery. In contrast, in the cases of haematoma of the birth canal the artery embolized was more frequently the internal pudendal artery. The

material used for embolization was Spongostan in 21 cases (78%) and in other cases contour particles, PVA particles and microcoils.

We register 2 minor complications during the procedure: 1 case of small venous haematoma and 1 case of thrombosis of the external iliac artery which required urgent surgery. During the follow-up, 4 out of the 27 cases had a posterior pregnancy and gave birth at term and there were 3 women who present and early miscarriage.

Conclusion

Postpartum hemorrhage is the first cause of maternal death during delivery in developed countries, representing 22.7 % of the total of maternal deaths. Data published in 2006 – 2008 Confidential Enquiry of Maternal and Child Health (CEMACH) show an incidence of 3.7/1000 live births and a global mortality of 0.39/100000 live births.

PPH constitutes an obstetric emergency which in most cases occurs in a sudden and unpredictable situation causing high morbi-mortality in both the fetus and the mother (severe anemia, coagulation disorders, renal failure, shock...). Therefore, clinical guidelines recommend that every hospital should have a specific protocol in order to face this kind of complications during delivery.

Several risk factors are associated with PPH, two the most influential are abruptio placentae and placenta previa. This fact agrees with the result in our study in which 47 % of cesarean deliveries were indicated for placenta previa. In our series, uterine atony was the first cause of PPH in 70.4% of cases. The causes of PPH have been described as “the four T’s”: Tone (uterine atony), Trauma(laceration of uterus, cervix and vagina), Tissue (retained placenta or clots and alterations of placentation) and Thrombin (pre-existing or acquired-coagulopathy). It is essential to make an early diagnosis of the situation and its cause in order to administrate the correct measures and improve maternal and perinatal results.

The initial management includes uterine massage and administration of uterotonic drugs. These measures solve most cases of PPH. In case of failure of these maneuvers, alternative therapeutic interventions include: hypogastric artery ligation, uterine artery ligation, uterine suture (B-Lynch, Haymann, Choo) and intrauterine compression balloon (Bakri). If the patient is hemodynamically stable the next step would be a selective PAE. Peripartum hysterectomy might be necessary due to instability.

Selective PAE is a conservative procedure for the treatment of PPH. A catheterization of the femoral artery is required to perform an angiography that locates the exact bleeding vessel in order to occlude it correctly. The advantages of the procedure are: minimally invasive technique that allows us to locate precisely the bleeding point, conservation of the uterus and preservation of fertility, high effectiveness and small risk of complications. In our center, the patient needs to be hemodynamically stable to transfer her to the Interventional Radiology Department situated in another building. The disadvantages are: necessity of qualified and well-trained experts and specific material, which are not available in all centers.

The rate of successful embolization in our study was 92.6 % (25/27 patients) which concurs with the numbers published in the literature (85 - 100 %). In our series there were 2 cases of unsuccessful PAE which required peripartum hysterectomy. No cases of re-embolization were detected. Complications originated from the procedure are infrequent (6-8 %): fever post-procedure, ischemic complications, vaginal fistula, muscle aches, neurological damage and occlusion of the external iliac artery. In our series the only major complication was one case of thrombosis of the external iliac artery which required urgent surgery. There were 5 cases of pregnancies after PPH and selective PAE in their first delivery, that gave birth at term. However, more studies need to be done to corroborate our results and provide more scientific evidence.

In conclusion, we can affirm that selective PAE is an alternative treatment for PPH that constitutes a safe procedure with small risk of procedure-related complications when performed by qualified and well-trained professionals and with minimal residual effects on the fertility of patients.

Key words: Postpartum Hemorrhage, Pelvic Artery Embolization, Peripartum Hysterectomy

Presenter name: Duna Trobo

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Incidence Of Obstetric Anal Sphincter Injury In Mafraq Hospital

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Introduction

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Retrospective study of the cases of third and fourth degree tear in Mafraq Hospital
and its management

Materials and Method

Retrospective Study from 3/4/2011 till 31/12/2013
total 22 patients of total number of 5255
over a period of more than 2 years

Results

Third and fourth degree tears Incidence and risk factors in Mafraq Hospital
Authors :
Dr Zakia Habib , Dr Tania El Hamarneh , Dr Rubina Sheikh ,Dr Iman Ibrahim ,Dr Ghadeer Al Heet , Dr Shahed Mahmoud , Dr Manal El Reddy , Dr Farah Asghar , Dr Karim El Masry .

BACKGROUNDS:

A third-degree perineal tear is partial or complete disruption of anal sphincter muscles, may involve either or both external (EAS) and internal anal sphincter (IAS) muscles.
A fourth-degree tear is a disruption of anal sphincter muscles with a breach of rectal
mucosa.

OBJECTIVES:

To determine incidence of cervical tear and its associated risk factors in Mafraq hospital, and compare it with standard rate which is 1% of vaginal deliveries .

DESIGN: retrospective study, the relevant data were collected from delivery and operative theater register book, data were entered into the Performa sheet and the results were analyzed manually.

PATIENTS AND METHODS:

There were total 22 patients of vaginal deliveries who had third and fourth degree tear during a period of 32 months from April 2011 to end of Dec 2013,
The following data were analyzed ; incidence, maternal characteristic (age , ,parity) , Gestational age ,BMI, GDM , risk factor e.g., previous history of third or fourth degree tear , h/o perineoraphy ,MOD , duration of labor ,h/o episiotomy ,type of tear , birth weight ,h/o shoulder dystocia ,type of repair, type of suture used , type of analgesia location of suturing , antibiotics and laxative administered, FU patient , h/o sexual dysfunction , involvement of anorectal surgeon with endo anal USS , anorecta l manometry performed at post natal follow up with details of future delivery .

RESULTS:

Total number of deliveries from the period of 3/4/2011 till 31/12/ 2013 were 5255
With total 22 patients developed third and fourth degree tear encompassing o.42% compared to standard 1%
12 patients (54.5%) were age(21-30 years) ,10 pts (45.4%) age(31-40 years).
10 pts (45.4%)were primigravida,12 (54.5%) were parous women,13(59%) had GA 37-40 years ,9 (4.9%) had GA> 40 weeks,No pt had previous Perineorrhphy,3 had vacuum delivery (13.6%) and 2 had home delivery (9%),8 patients had duration of labor 10 hrs (36.3%),no pt had BMI less than18.5, 1 (4.5%) had BMI 18.5-20, 13 had BMI 20-30 (59%),8 had BMI 30-40 (36.4%),2 had IOL (9%),9 had episiotomy (40.9%),12 had 3A tear (54.5%),4 had 3B tear (18.2%),4 pts had 3C tear (18.2%),2 pts had fourth degree tear (9%),19 had birth weight between 2.5-4 kg (86%), while 2 pts had birth weight(2-1.5 kg) (9%),1 pt had birth weight> 4 kg (4.5%) . 1 pt had shoulder dystocia (4.5%) at 3.8 kg birth weight,14 pts were sutured in the OT under general analgesia (63.6&), and 8 pts were sutured in labor room (36.4%) under local analgesia.
In 9 pts PDS 2/0 were used (40.9%),7 pts had 3/0 PDS suture (7%),Vicryl 2/0 was used in 4 pts (18.2%),while no record was available in 2 pts (9%),No appropriate method of diagnosis was documented

as combined pv/pr examination ,8 pts were sutured by overlapping technique (36.4%),.All pts (100%) received antibiotics and laxatives

FOLLOW UP

Most pts defaulted clinic with 1 pt had fecal incontinence at 12 weeks (4.5%0) 1 pt had faecal incontinence immediately post op period ,advised for end anal USS and anoretal manometry ,pt defaulted clinic,

1 pt (4.5%) h/o 4th tea reviewed by colorectal surgeon before discharge and was asymptomatic.

6 pts had normal follow up (27.2%) and remaining defaulted the clinic, perineal pain in the follow up appt

No proper debriefing were documented in the pt record

CONCLUSION :

Incidence of Obstetrics Anal Sphincter Injury in Mafraq hospital is 0.42% which is far below the average standard according to RCOG which is 1 %

No proper documentation were available in the medical records including method of diagnosis and technique used.

RECOMMENDATIONS :

All women should be offered physiotherapy,pelvic-floor exercises for 6–12 weeks after obstetric anal sphincter repair and should be reviewed 6–12 weeks postpartum by a consultant obstetrician and gynecologist.

All women with previous history should be Counseled about risk of developing anal incontinence or worsening symptoms with subsequent vaginal delivery and advised ,there is no evidence to support role of prophylactic episiotomy in subsequent pregnancies.

All women with previous history who are symptomatic or have abnormal endoanal ultrasonography and/or manometry should hav option of elective caesarean birth., it is essential to ensure that the anatomical structures involved, method of repair and suture materials used are clearly documented and that instruments, sharps and swabs are accounted for.

woman should be fully informed about nature of injury and benefits of follow-up it should include written information where possible, and Risk management team involved

REFERENCES :

Green-top Guideline No. 29
March 2007

Conclusion

incidence of OASIS in Mafraq Hospital is 0.42 % compared to the international standard of 1% of vaginal deliveries

Key words: tear , sphincter, fourth , degree, theatre, anesthesia

Presenter name: Dr Zakia Habib

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Causes of maternal mortality in the Huambo province of Angola in 2011 to 2013.

Cezaltina Nanduva Kahuli

Autora esta filiada na Faculdade de Medicina da Universidade José Eduardo dos Santos, Angola, Estudo retrospectivo das causas de mortalidade materna na Província do Huambo 2011 a 2013

Introduction

Introduction

Maternal mortality rates have traditionally been high in Sub-Saharan Africa, but there are difficulties in quantifying the problem due to limited registration. The aim of this study was to identify recent rates and causes of maternal mortality in the Huambo province of Angola.

Materials and Method

Material and Methods

The death certificates, the registries of the four hospitals with maternity care, and the registries of maternal assistance departments were consulted to identify cases of maternal death occurring in 2011, 2012 and 2013. The hospitals' clinical records were reviewed to extract data on maternal age, cause of death, area of residence, occupation, level of education, form of arrival to the hospital, and place of death.

Results

Results

A total of 269 maternal deaths and 84 399 live births were identified during the 3 years, for an overall maternal mortality ratio of 318.7. The number of live births significantly decreased over time, but maternal mortality remained stable. Clinical records were available for review in 61% of cases. A total of 66.9% of deaths occurred in women under 30 years, 47.6% were from rural areas, 53.6% were unmarried, 49.4% had none or very basic education, 47.9% did not have a job, 38.5% were transferred from other heath facilities, 95.2% died in the Obstetrics department and 74.7% were still pregnant at the time of death. Direct maternal deaths accounted for 76.5% of cases, and hypertensive disease (30.7%), sepsis (29.9%) and haemorrhage (21.2%) were the leading causes. The most frequent causes of indirect maternal deaths were hepatitis (12.9%), malaria, tuberculosis and HIV/AIDS (10.2% each).

Conclusion

Conclusion

Maternal mortality remains high in the Huambo province, in spite of a fall in the birth rate. Hypertensive disease, sepsis and haemorrhage are the leading causes of death. Recognition and quantification of the problem is a necessary first step in order to identify priority areas where improvement in healthcare is required.

Key words: pregnant hypertensive disease, haemorrhage deaths, sepsiss

Presenter name: Cezaltina Nanduva Kahuli

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UTERINE NECROSIS AFTER CESAREAN DELIVERY: A CASE REPORT

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Introduction

Uterine incisional necrosis is a rare but serious complication of caesarean delivery. Pathophysiology has been described as hematoma resulting in abscess formation and necrosis of the incision. There has been a poor correlation between CT findings and uterine dehiscence. In most instances, diagnosis is only confirmed during exploratory surgery. Hysterectomy has been the described treatment for the condition.

Materials and Method

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Results

We report the case of a 32-year-old woman with uterine necrosis after caesarean section. The ceaserean was initially complicated by the presence of multiple adhesions, although she had no history of previous abdominal surgery. On the 3rd post-operative day the patient presented with abdominal pain. Findings on CT scan were interpreted as normal in post-caesarean context. On the 6th day, the patient was subfebrile with inflammatory signs on the surgical wound. Antibiotic therapy was started. Diagnosis of uterine necrosis was made on the 9th day post-caesarean by exploratory laparotomy. Surgical findings of abdominal and pelvic infection with uterine necrosis led to hysterectomy. During the postoperative period she had several other infectious complications (infection of the surgical wound, pelvic and mesogastric abscess formation and pneumonia). The patient was discharged on the 22nd post-hysterectomy day.

Conclusion

Uterine incisional necrosis is a rare complication of caesarean delivery associated with serious morbidity and mortality. A high index of suspicion is the key for timely diagnosis and treatment.

Key words: uterine necrosis, uterine incision dehiscence, ceaserean section, postpartum care

Presenter name: Daniela Vila Real

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INDUCTION OF LABOUR WITH MISOPROSTOL VS DINOPROSTONE: SIX MONTH EXPERIENCE

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Introduction

The goal of induction of labor is to achieve a vaginal delivery by stimulating uterine contractions before the spontaneous onset of labor. Induction of labor is indicated in numerous situations, whenever the benefits of delivery outweigh the risks of pursuing the pregnancy. Prostaglandins are widely used to induce labor and ripen the cervix when unfavourable. Comparing the outcome of labor induction with misoprostol vs dinoprostone is of great importance for when one needs to decide for one of these methods.

Materials and Method

We conducted a retrospective study analysing the clinical cases of women (with a singleton pregnancy, intact membranes, and unscarred uterus) who had induction of labor and delivery between October 2013 and March 2014 in our institution. The induction was performed in accordance with department protocol: dinoprostone (10mg vaginal delivery system) or misoprostol (50µg vaginally) when the cervix was unfavourable, or oxytocin in those women with a good Bishop score. We evaluated the outcome of induction of labour and compared results of the use of misoprostol vs dinoprostone.

Results

The 155 women that filled the inclusion criteria represent 19% of the deliveries in our institution for the period of time in study. Vaginal delivery was achieved in 63% of inductions overall (with 47% of those deliveries instrumented). In particular, it was achieved in 68% of inductions with misoprostol and 59% of inductions with dinoprostone. We studied the effectiveness of each induction method, defined as the likelihood of vaginal delivery within 24 hours. This probability was statistically higher with misoprostol (55%) than with dinoprostone (22%) (p=0.0019, 95% CI). Induction of labor with misoprostol was significantly faster than with dinoprostone: 16h40min vs 27h20min (p=0.0009, 95% CI). Non-reassuring fetal status was the most frequent indication for caesarean delivery after induction of labor. Women induced with misoprostol had a lower rate of caesarean delivery for this reason than those induced with dinoprostone (18% vs 27%). The rate of caesarean delivery due to failed induction was also smaller in women induced with misoprostol. There were no cases of neonatal mortality or of 5 minute Apgar score less than 7 in either group.

Conclusion

Misoprostol seems more effective than dinoprostone and equally safe. Its use led to fewer failures in achieving vaginal delivery, a higher rate of vaginal delivery within 24 hours, and a shorter induction to delivery interval. This more favourable profile, particularly in terms of convenience, justifies considering the use of misoprostol as a method of choice for induction.

Key words: Induction of labor, Misoprostol, Dinoprostone

Presenter name: Daniela Vila Real

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MERS CO Virus in pregnancy

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Introduction

Backgrounds :MERS-Co V Syndrome is a severe viral illness first reported in Saudi Arabia in 2012. presents with fever cough shortness of breath ,It can affect lower respiratory, kidney, intestinal (bowel) and liver cells. Primary reservoir is Bats, intermediate for transmission to human, modes of transmission are droplet, direct contact. Patients present with severe pneumonia and respiratory distress syndrome ,acute renal failure ,Incubation period is 7 days

Materials and Method

case report about MERS Co V in pregnancy

Results

Case study

32 ears old Jordanian lady G4 P3 at 32 weeks gestation , attended ER with h/o lower abdominal pain on radiating to thigh , associated with fever for 4 days , chills, headache , dizziness and loss of appetite .advised admission ,pt refused and signed against medical advise ., .Pt admitted after 3 days with high g fever, right sided pleuritic chest pain, dry cough and breathing difficulty .Pts husband and one child were admitted to other hospital .Tem 38.3 c, Rr 30 br/min BP 95/61 mmhg , o2 sat 95 %, bilateral lung consolidation, ,HCO3: 24.2 ,sat O2: 94.4 Patient was having respiratory alkalosis with severe hypoxemia with increased A-a gradient ,CT chest: Diffuse areas of consolidation in both lungs more in the bases, and excluded Pulmonary embolism.D2 post admission temp 37.5 c, pulse 115 bpm, respiratory rate 24 c/m , BP 100/50 mmhg , o2 sat 95 %, CTG showing baseline tachycardia, impression bilateral pneumonia started on IV antibiotics and LMWH.

day 3 post admission was distressed , RR >35, so2 89% on 5litre O2,BP stable, Pulse rate 135/minStarted on legeonella, mycoplasma and influenza workup, Patient's condition became worse despite standard antimicrobial therapy and she had to be transferred to the ICU for assisted respiration . with impression of respiratory failure ,at day 3 testing for H1N1 and novel coronavirus done and was started on Oseltamivit, received steroid injection for fetal lung maturity and growth USS was uneventful, EFBWT 2300 gm,day 4 O2 sat 60 % , H1N1 screening negative , pt was critically ill, tachypnea and tachycardia with O2 sat 88 % ,Further interferon and Ribavirin were added to on mechanical ventilation and decided to conduct delivery of baby to take off obstetric burden. day 5 Pt undergone emergency LSCS with outcome of alive baby female, Apgar's (6 /1, 8/5), weight 2240gms, day 6 ,Remains critically ill ,On day 8 Pt deteriorated with h/o MERS-Co V pneumonia, respiratory failure, - Septic shock, on nor epinephrine ,pt kept on deteriorating, had respiratory failure .Pt deceased after failed resuscitation

Conclusion

- pregnant mother are high risk group for MERS complications due to change in immune response and fetal effects of a severe respiratory syndrome.

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Conclusion

Conclusion

- pregnant mother are high risk group for MERS complications due to change in immune response and fetal effects of a severe respiratory syndrome.

Key words: MERS Co V, Pregnancy ,Mortality, respiratory failure , cardiac failures , LSCS

Presenter name: Dr Zakia Mohammed Habib

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Necrotising Fasciitis of the perinium

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Introduction

Introduction
Necrotizing fascitits is life-threatening, progressive, rapidly spreading, inflammatory infection located in the deep fascia. rapidly destroy the skin and soft tissue beneath it,.3 types of NF. Type I : polymicrobial flora. Type II Group A β-Streptococcus bacteria Type III : gas gangrene, transmission by direct contact or a pin prick .

Materials and Method

case presentation

Results

. Case study
46 Yrs. Old Filipino referred from AD Airport , arrived from Manila with h/o fever, 2weeks duration with shortness of breath, Orthopnea, cough, Lower abdominal pain , myalgia, fatigue, dizziness, and redness and swelling in the pre anal area for 2 weeks
LMP: 6/12 back , P1 16yrs,
On examination
Temp: 39 ,CPR: 127 bpm,RR: 30 c/m ,BP: 88/50 mmhg ,O2 sat 96% General: Alert, toxic appearance severe distress, anxious, dehydrated, difficulty breathing., Tachycardia.: abdomen is tense , with swelling lower area, Genitourinary: vaginal redness with black colored necrotic patch on right of anal area, both labia were red and inflamed
Differential diagnosis ;PID ,Necrotizing fasciitis , Septic shock ,,Perianal abscess
Investigtions
,Neutrophils % : 95.6 CRP:528.42mg/l ,Blood culture: gram +ve cocci,HVS: Mixed genito-urinary tract organisms ,Urine culture: no growth .Radiology:CXR: no significant finding ,,CT of the abdomen: pelvic and paracolic free fluid and generalized edema of the soft tissues
Management ,
Pt was started on broad spectrum iv antibiotics as Linezolide, Piperacillin tazobactam and Clindamycin , pt had cardiac flutter was started on B Blocker and managed by multidisciplinary teams.
On day 1 post admission had diagnostic laparoscopy showed hemorrhagic inflamed tube,uterus hemorrhagic inflamed , fibrous adhesions , smelly foul discharge

- A limited debridement and excision of necrotic perianal skin, tissue biopsy from perianal area showed insignificant HPE result
- Pt was critically ill, Severely septic and acidotic and transferred to ICU on Inotropic support , sedated with fentanyl , midazolam ,aerodynamically unstable, struggling with increase erythema and necrosing of the perianal area.
- On day 2 post admission, undergone pelvic extensive debridement of perianal, vulvar region in a butterfly shape , Generous excision of perirectal and perineal necrotic tissue, right sided vulvectomy, (TAH) and (BSO) ,pelvic adhesiolysis and Mid transverse defunctioning colostomy. peritoneal cavity contained significant amount of turbid straw-colored .
- On day 3 post admission ,renal function tests showed S creatinine 249 micromol/l,Urea 21.2 mmol / Crp 506.89 chronic renal replacement treatment protocol started ,and renal dialysis started as pt had oliguria and renal failure , platelet transfusion for low platelelts 11000 and was on ventilation SFI O2 45 /

On day 4 post admission
CT Brain showed left thalamic infarction with sella occipital hemorrhage with Glasgow coma scale of 3/15 pt condition was badly deteriorated and died after failed resuscitation

- Conclusion
- The reported mortality rate in patients with necrotizing fasciitis as high as 80

References
RCOG strat OG

Conclusion

- Conclusion

- The reported mortality rate in patients with necrotizing fasciitis as high as 80%

Key words: Necrotising Fasciitis , perinium , mortality, renal failure , thalam infarction , colostomy , hystrectomy
Presenter name: Dr Zakia Mohammed Habib

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Assissted Reproductive Technology in Previous 5 LSCS Patient

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Introduction

Backgrounds :
Multiple pregnancy rates in the UAE have increased , mainly attributed to an increase in maternal age and increase in using assisted reproduction techniques (ART) are methods used to achieve pregnancy by artificial or partially artificial means,

Materials and Method

case presentation

Results

Case study
Demographic
36 Years old UAE Pt Admitted to Rahba Hospital as P 5+2 , Previous 5 LSCS ,2 Miscarriages , 3 alive and well , h/o IVF pregnancy .
15+6 weeks with H/o cervical cerclage was felt off at home .Triamniotic/Trichorionic triplet pregnancy , C/o bleeding PV for 2 days no abdominal pain .Hb 105, CRP 23 ,HVS GBS , A negative / received anti D .pt. started on antibiotics Cefazolin and metronidazole .
obstetric History
Previous 5 lscs with 2 lscs at 26 and 25 weeks still birth / IUFD for fetal cystic hygroma, hydrops foetalis , Thick adhesions one TOP for abnormal fetus.
Examination
bulging membranes, cx fully dilated . Passed non-viable male fetus , Cord clamped , cut close to cervix after occluding the cord with vicryl and continued antibiotics.
USG showed Diamniotic dichorionic twin , Internal os open 1.7 cm , Cervical length 1.2 cm fetuses.Pt was transferred to tertiary Centre Mafraq Hospital for further management .
Management
Pt was kept for observation and advised for CRP / HVS and WBCS monitoring twice weekly on antibiotics and was discharge the following day with antenatal follow up ,advised for serial growth scans, monitor temperature twice , to report if increased bleeding or temperature.
Scan was done the next day and shows 17 week twin pregnancy and a low lying placenta 1.8 cm away from os cervix 3.36 cm
Progress
Pt admitted to the emergency department at 17 weeks 5 days with h/o bleeding pv ,passed both fetuses in the ER with retained placenta c/o bleeding pv with low blood pressure .
Examination
BP 98 /39 mmhg Pulse 100 bpm , in shock condition
Resuscitation performed and pt. shifted to the OT undergone Manual Removal Of placenta under GA .total EBL 1300 ml . received misoprostol .
Repeated Hb 76 gm and hct 0.264 , Pt was kept on IV Antibiotics and discharged on day 2 post op on good general condition with follow up
Conclusions
Multiple pregnancies (twins, triplets or more) are high risk pregnancy with increased maternal morbidity and mortality including risk of pre-eclampsia, hemorrhages, gestational diabetes and maternal death, a good outcome is not always the result.
References
NICE Guidelines
TOG RCOG
Assisted Reproductive Technology Wikipedia

Conclusion

Conclusions

Multiple pregnancies (twins, triplets or more) are high risk pregnancy with increased maternal morbidity and mortality including risk of pre-eclampsia, hemorrhages, gestational diabetes and maternal death, a good outcome is not always the result.

Key words: multiple pregnanyc , triplet, LSCS ,ART ,Manual removal of placenta ,

Presenter name: Dr Zakia Mohammed Habib

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The Effect of Intrahepatic Cholestasis of Pregnancy On Intrapartum Fetal Heart Rate Tracings

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Introduction

Intrahepatic cholestasis of pregnancy (ICP) is associated with poor fetal outcomes that seem independent of the severity of the disease. This study aims to evaluate if there are differences in intrapartum fetal heart rate (FHR) and delivery outcomes between patients with severe compared with mild ICP.

Materials and Method

Retrospective analysis of singleton pregnancies with ICP who were admitted for antenatal surveillance and subsequent delivery. Severe ICP was defined as having total bile acids levels greater than 40 □mol/mL, whereas those with mild intrahepatic cholestasis of pregnancy had total bile acids between 10 and 40 □mol/mL. The primary outcome was to compare intrapartum fetal heart rate of pregnancies with mild and severe ICP. Fetal heart rate tracings were classified according to the ACOG classification. Secondary outcomes included the evaluation of gestational age at delivery, birth weight, type of delivery and Apgar score at 5th minute. Fisher's exact, x2, and Mann-Whitney U tests were used.

Results

Sixty-two pregnant with ICP were identified, 14 with severe ICP and 48 with mild disease. The severe disease showed significantly higher median total bile acids (20,0 IU/mL vs 61,7 IU/mL, p< 0,001) and alanine aminotransferase levels (36 vs 175, p=0,01). The incidence of indeterminate (category II) (59,6% mild ICP vs 57,1% severe, p=1) and abnormal (category III) FHR tracings (mild ICP: 4,3% vs 7,1%, p=0,55) was similar in both groups. Maternal age, parity, gestational age on diagnosis and labour, cesarean delivery rate and neonatal outcomes showed no differences between both groups.

Conclusion

Pregnancies complicated by severe ICP did not have a higher risk of FHR abnormalities tracing when compared with mild disease.

Key words: Intrahepatic cholestasis of pregnancy; fetal heart rate tracing; bile acids

Presenter name: Diana Martins

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UMBILICAL CORD PH IN EMERGENCY CESAREAN DELIVERY

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Introduction

An emergency caesarean delivery is performed after labour has begun, but it is only required in 0,5% of cases.

Obstetrical services should have the capacity to begin an emergency cesarean delivery within 30 minutes of the decision to perform the operation.

Materials and Method

This is a cross-sectional study that analyzes emergency cesarean sections, indications for surgery and risks for mother and baby during the period from 1 st January 2014 to 31 st December 2014 in Hospital de Poniente.

Variables studied in research are umbilical cord arterial and venous pH in fetuses born by emergency cesareans.

Umbilical cord blood sampling was obtained from umbilical cord in the first minute after fetal birth.

Results

92 % of the emergency caesareans performed were due to a suspected loss of fetal wellbeing (19,2 % of the total amount of caesarean sections).

The average rate of umbilical cord arterial pH in emergency cesarean was 7,24 and umbilical cord venous was 7,28.

Only a fetal umbilical cord arterial pH in an emergency cesarean was less than 7.00 (6,96) and also the umbilical cord venous pH was 6,98. This fetus required neonatal care but he recovered afterwards.

Not adverse maternal results have being registered.

Conclusion

Emergency cesarean is associated with increased risks of severe hemorrhage, anesthetic complications from rapid administration of general anesthesia, and accidental injury to the fetus or abdominopelvic organs.

The relationship between umbilical cord arterial pH and serious adverse neonatal outcome suggest that the cut-off for significant pathologic acidemia is a pH less than 7.00.

Fetal scalp blood sampling is a direct method of determining pH or lactate concentrations for evaluation of intrapartum fetal acid-base status before making cesarean decision. Nevertheless, fetal scalp blood could be a good way to identify risk factors for emergency cesarean deliveries and assess the effects of the emergency situation on maternal and fetal prognosis and improve the adequacy of cesarean.

Key words: emergency cesarean, umbilical cord ph, fetal acidemia.

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MANAGEMENT OF PRETERM LABOR, A YEAR REVIEW

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Introduction

Preterm labor is the most important cause of perinatal adverse events both in mortality terms and quality of life.

Preterm labor precedes about fifty percent of preterm births but approximately thirty percent of preterm labor spontaneously resolves, less than ten percent of women presenting with preterm contractions give birth within seven days, fifty percent of patients hospitalized for preterm labor give birth at term.

Interventions to reduce the likehood of delivery should be reserved for women with preterm labor at a gestational age at which a delay in delivery will provide benefit to the newborn; because, tocolytic therapy generally is effective 48 hours, only women with fetuses that would benefit from a 48 hour delay in delivery should receive the same.

Materials and Method

Our investigation is an observational study , based on a data obtained from our database including all deliveries within our Gynecology and Obstetric department at Hospital de Poniente, Almeria, Spain, recorded during 2014; from the first of January 2014 to December 31th.

Is important to point out that our hospital lacks a neonatal intensive care unit so that the protocol is to derive those expectant mothers under 32 weeks of gestation or whose fetus don't exceed 1500 grammes in weight to the referral hospital.

We counted the ones than were treated, admitted and given birth in our hospital.

We did not account for those preterm birth threats derived to the referral hospital.

Results

Total of 2551 deliveries within the year, of which 6.62 percent were preterm deliveries.

We accounted for all preterm births (169) as well as those preterm labor (22) treated who gave birth in our hospital, reaching full term (7 ones) delivery or not (15).

Of those were diagnosed as preterm labor in advance the 0.86 percent of the total of deliveries. Form these 22 ones treated, admitted and given birth in our hospital, a 31.8 percent rised the term . The rest, amounting to 68.1 percent reached the end of gestation period before 37th week as newborns.

63.63 Percent of these preterm labor threats were treated with tocolytic (mainly Tractocile and Nifedipine) and Betamethasone.

In 7 cases, amounting to 31.8 percent only the betamethasone was administered because of de imminence delivery. In one case, the pregnant patient carried a pessary and was treated only with progesterone.

Conclusion

For patients with true preterm labor, tocolytic therapy often abolishes contractions temporary, usually 24-48 hours, but does not remove underlying stimulus than initiated the process of parturition or revere parturitional changes in the uterus.

Neonatal outcome has improve during this interval as a result of widespread use of antenatal glucocorticoids sand advances in neonatal care

Key words: Preterm labour

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Effect of pregnancy and childbirth on perineal lacerations

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Introduction

The aims of this research study are to evaluate the incidence of third and fourth- degree obstetrics perineal lacerations in the Hospital of Poniente in El Ejido, Almeria and to identify risk factors.

Materials and Method

This is a cross- sectional study that analyzes childbirth in the period covered from 1 st January 2013 to 31 st December 2013 in our hospital. Of 2546 births we have considered those assisted vaginal deliveries identifying 22 cases of anal sphincter lacerations.

Variables studied in research are onset of labour and delivery, use of episiotomy, fetal weight, parity of women and shoulder dystocia.

Results

In our study, the rate of anal sphincter lacerations is 0.86 % (third degree lacerations). We have found that 72.2 % of them are 3B-degree (less than 50% muscular fibers of external anal sphincter damaged) and the rest are 3A-degree (more tan 50% of external anal sphincter damaged). 55,5 % of these patients are primiparous.

Fetal weight ratio is 3.365 grams of kilograms and in 20 % of deliveries fetal macrosomia is registered. The onset of 72,7 % of vaginal delivery is spontaneous and 59 % of them finished in assisted vaginal delivery (53% vacuum-forceps extraction, 30,7 % forceps extraction and 15,4 % Thierry´s spatula extraction). Episiotomy is involved in 45,5 % of deliveries (100% of assisted vaginal deliveries).

Two cases of shoulder dystocia are registered.

Conclusion

Nulliparity, shoulder dystocia fetal macrosomia, assisted vaginal delivery (forceps) and the use of episiotomy are some of the risks factors for perineal laceration in labour.

Primary prevention of risk factors involves restriction of episiotomy and choosing the right medical equipment in assisted vaginal delivery.

Key words: perineal lacerations, assisted vaginal delivery, pregnancy, childbirth

Presenter name: A. Astorga Zambrana

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INTRAPARTAL INJURIES OF THE PELVIC FLOOR; PERINEAL LACERATION AND EPISIOTOMY

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Introduction

Risks associated with operative vaginal delivery need to be evaluated with respect to appropriate control groups and reasonable alternative procedures.

Short-term maternal risks from instrumental delivery include pain at delivery, perineal pain at 24 hours, lower genital tract lacerations and hematomas, urinary retention and incontinence, anemia and anal incontinence.

Severe maternal trauma is primary associated with rotational and midforcerps operations.

Though, maternal complications can occur with spontaneous delivery, they are more likely to be associated with operator delivery.

Materials and Method

Observational,, descriptive retrospective study of 2079 vaginal deliveries of our own data base from January 1st to December 31th of 2014 of the total of third and fourth degree lacerations of the pelvic floor.

First and second degree lacerations were not taken into account for this studio.

Results

27 of third degree lacerations and none of the fourth one were saved.

Those, took placed in the next deliveries of the total 2072 vaginal deliveries: 9 were spontaneous deliveries, 6 obstetric spatula, 4 forceps and 8 vacuum. Vacuum deliveries with episiotomy: 7; vacuum without episiotomy:1; spatula delivery with episiotomy: 6; forceps with episiotomy: 3; forceps without episiotomy: 1; spontaneous with episiotomy: 6; spontaneous without episiotomy: 3.

We can see thanks to our study that spontaneous delivery amounts to 33.3% percent, vacuum extraction 29.6 % percent, obstetric spatula 22.3 % percent and 14.8% forceps delivery.

Additional maternal morbidities occur when episiotomy is performed at the time of the operative vaginal delivery.

- VACUMM DELIVERY WITH EPISIOTOMY: 25.92%
- VACUMM WITHOUT EPISIOTOMY: 3.7%
- SPATULA DELIVERY WITH EPISIOTOMY: 22.2%
- FORCEPS WITH EPISIOTOMY: 11.1%
- FORCEPS WITHOUT EPISIOTOMY: 3.7%
- SPONTANEOUS WITH EPISIOTOMY: 22.2%
- SPONTANEOUS WITHOUT EPISIOTOMY: 11.1%

Conclusion

Most studies show performing an episiotomy(midline or mediolateral) appears to increase, rather than decrease, the risk of perineal trauma presented above, when employed in association with operative vaginal deliveries.

Our experience shows similar conclusions to the medical evidence.

Rates of third and fourth degree lacerations have decreased over several decades, and many observational data suggest that more than 50% of this reduction can be accounted the decreased use of forceps and episiotomy

Key words: perineal injuries

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Fetal Growth Restriction and delivery experience in Hospital of Poniente

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Introduction

Fetal growth restriction (FGR) is the term used to designate a fetus that has not reached its growth potential because of genetic or environmental factors and often with contributions from overlapping factors. Mortality and morbidity are increased in these infants compared with those who are appropriate for gestational age. This study considers the onset and the method of delivery of pregnant woman with growth restricted fetuses in Hospital de Poniente.

Materials and Method

We have designed an observational descriptive study that we have carried out for a year (from 1st January 2014 to 31 st December 2014). Significant problems remain in terms of defining the population of growth restricted fetuses. We have analyzed these fetuses whose birth weight is between the 3rd to 10 th percentile with abnormal umbilical artery doppler and those whose weight is below 3rd percentile.

We have defined a population of 205 fetuses which represents 8 % of births (2551).

We have analyzed obstetrical outcomes taking into account the method of delivery which considers the onset of labor (induction of labor, elective cesarean delivery or spontaneous labor) and end of labour (cesarean delivery, spontaneous vaginal delivery or assisted vaginal delivery).

Results

In our study, 56 % of women experienced spontaneous labour, 33 % underwent elective induction and 11% underwent elective cesarean.

The method of delivery was as follows: 12 % of vaginal deliveries (10 % vacuum deliveries and 2 % spatula assisted deliveries), 30 % of cesarean deliveries and 58 % of spontaneous vaginal deliveries.

Regarding inductions, 41 % were spontaneous deliveries, 44 % cesarean delivery (most of them for non-reassuring fetal heart tracing) and 15 % assisted vaginal delivery.

We have not identified adverse outcomes.

Conclusion

Growth restricted fetuses may have limited capacity to tolerate the hypoxic stress of labour. This is the probable reason why in almost 30 % of our population cesarean delivery happens because of a non-reasuring fetal heart tracing. Assisted vaginal delivery is also on the increase.

Notwithstanding, the rate of vaginal delivery is high 60 % in cases of FGR undergoing a trial of labour. There are not registered neonatal complications in our population so it is reasonable not to always plan an elective cesarean.

Key words: Fetal growth restriction, cesarean delivery, fetal weight

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PERINATAL APGAR SCORE CORRELATED WITH NON-REASSURING FETUS STATUS EMERGENCY CESAREA

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Introduction

Assessment of the fetus during labor is a challenging task. The rationale for monitoring the fetal heart rate is that its patterns are indirect markers of the fetal cardiac and medullary response to blood volume changes, academia and hypoxemia, since the brain modulates heart rate.

The primary aim of monitoring the fetal heart rate is to identify the events previously appointed. A secondary aim is to avoid fetal neurologic injury, if possible

Monitoring of the fetus and pH sample from fetal scalp are tools that are use to value the fetus status and indicate obstetrical acts like operative deliveries and emergency cesarean, but do not always tie in with the APGAR SCORE of the newborn.

Materials and Method

Descriptive retrospective study of our database of 479 cesareans performed during the year 2014, from January the 1st to December 31th.

Non-reassuring fetus status cesareans were indicated by protocol as non- reassuring monitoring or pH under 7.20 from the fetus scalp.

It was compared with newborn status valued with Apgar Score. This score value: strength and regularity of heart rate, lung maturity, muscle tone and movement, skin color/oxygenation and reflex response to irritable stimuli. From 7-10 points appraise normal status; 0-6 distress

Results

The full database comprises 479 cesareans. The ones that were indicated by non-reassuring fetal status were 92.

Total emergency cesareans practiced by non-reassuring fetal status amounted to 19.21%.

Apgar Score rate calculated of those cesareans was, at first, fifth and tenth minute of life is: 8 at fist, 9 at fifth and 10 at tenth minutes.

Less than a 10% were under 6 points score in the first and fifth minutes.

Only five Apgar Score results of five different deliveries were not saved.

Conclusion

Historically, asphyxia was defined by a low one-minute and five-minute Apgar score. This was not reliable criteria because only 30 to 40 percent of newborns who are depressed at birth are acidotic at delivery, which suggest that depression is related to factors other than prolongued asphyxia. Both the American College of Obstetricians and Gynecologiste and American Academy of Pediatrics consider use the Apgar score in defining asphyxia as a misuse of this scoring system.

Key words: Apgar score, emergency cesarea

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CESAREAN DELIVERIY: RATE AND INDICATIONS REVIEW DURING THE YEAR 2014

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Introduction

Nowadays cesareans practice supposed one of the most frecuent emergency surgeries. Cesarean rates have shown an increase in the last years due to multiple reasons, reaching up to 28% of the deliveries in some countries like in USA.

The WHO do not considered cesareans rates above 15%, but global rates shown increased tendencies all around globe.

Besides, if take a look to the cesareans increase, together with the perinatal mortality rates, it can be inferred that the reduction of the last ones has not occurred in accordance with the increase of the firsts, what supports the theory the stating that factors different tan cesareans are contributing to this reduction. Several issues should be discussed by obstetric experts to come to an agreement on for the instructions an adaptation of this chirurgic technique, to stop the current increasing rates of cesareans.

Materials and Method

This reserach is based in an observational study, in wich we describe our cesarean practices, saved in a database where they are classified according to the followed protocol in each of the cases, suggested y Spanish Heath System (SNS) together with Manacor Hospital since 2010. Here it is shown collected data from Janueary the first to 31th of December of 2014.

An emergency cesarean delivery is defined as cesarean delivery performed after labour has begun. In that case, this protocol define emergency ones as:

1: Non- reassuring fetal status.
2: Failure of progress during induction
3: Failure of progress during labor
4: Disproportion
5: Miscellany

The non emergency cesareans are those that are planned : non-cephalic presentations, placental disorders, double previous cesareans , maternal infection with significant risk of perinatal transmission during vaginal birth, twins fist fetus in non-cephalic presentation, non-reassuring fetal status with no labor induction possibility, suspected macrosoma (>4500 grammes), etc.

In the case of our hospital, we do not practice cesareans under maternal request.

Results

From a total of 2551 deliveries, 479 were cesarean deliveries, amounting to 18.78% of the total deliveries in the year.

From which emergency ones were:

- 92 non-reassuring fetal status, amounting to 19.21 %.
- 52 failures of progress during induction, amounting to 10.85%.
- 131 failure of progress during labor, amounting to 27.34 %.
- 37 disproportion, amounting to 7.72%.
- 14 miscellany, amounting to 2.92%.

Planned cesarean births: 6 Transverse presentation; 5 twins fist fetus non cephalic; 12 estimated fetal weigh over 4500 grammes ; 80 Breech presentation; 3 total occlusive placenta previa; 1 marginal placenta previa; 22 double previous cesarean; 4 uterus previous surgery;20 special cases. Amounting to 31.94% of the total of cesareans.

Only 12 of those cesareans were not correctly indicated; 2.5% of the total

Conclusion

Our results are consistent with the WHO suggestions and are close to the 15% of the maximum rate considered and proposed by them, what proves the usefulness of the clinical practice protocol to reduce the cesarean rate.

There are several obstetrical epidemiologic aspects that justify the percentage increase of global caesareans deliveries, like advanced mother age, the increased of the risk in those pregnancies, increased of assisted reproductive technology, and in consequence, an increased of multiples pregnancies. It should be pointed out that the percentage increase of caesareans imply an increase in the number of iterative ones.

Key words: Cesareans delivery indicatios

Presenter name: A Astorga Zambrana

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CHARACTERISTICS OF WOMEN WITH INSTRUMENTAL CHILDBIRTH: OUR EXPERIENCE AT HOSPITAL DE PONIENTE (ALMERIA, SPAIN)

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Introduction

We aim to determine the socio-demographic and obstetric characteristics of women with childbirths involving Kielland forceps, Thierry's spatula or through suction pads.

Materials and Method

We performed a descriptive retrospective study of all pregnant women who had an instrumental childbirth in the Hospital de Poniente of Almeria (Almeria, Spain) during the last trimester of 2013. We analyzed the following variables: party, nationality, the monitoring of the pregnancy (defined as having at least three medical visits during the pregnancy), single or multiple birth, the mothers knowledge on pregnancy related issues (assessed through attendance to pregnancy educational sessions) and if the mother was accompanied during delivery.

Results

From a total of 98 deliveries, a 59,81% were Spanish women, followed by a 27.55% who were from Moroccan and a 6.12% were from Rumania. 69.38% women were nulliparous women and the rest had previously had a natural or caesarean section birth. The majority, 97.95%, were singleton birth and 2.05% had multiple babies per delivery. A 93,87% had an appropriate monitoring of the pregnancy versus only a 6.12% who had less than 3 medical visits during their pregnancy. A minority of women, 13.26%, had attended pregnancy educational session. During childbirth, 84% of the women were accompanied by their spouse and 15.30% were accompanied by their brother, friend or mother, no cases were alone during delivery.

Conclusion

Women with instrumental births in the Hospital de Poniente de Almeria tend to be of Spanish nationality, nulliparous, have a good monitoring of the pregnancy even though they do not attend pregnancy educational sessions and the majority were accompanied by their spouse

Key words: characteristiscs of women, instrumental delivery

Presenter name: C.Navarro Gutierrez

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FETAL DISTRESS SUSPECTED BY ELETRONIC FETAL MONITORING AS CAUSE FOR CESAREAN SECTION

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Introduction

Fetal distress has been regarded as one reason for cesarean birth that is almost impossible to reduce. Non-invasive electronic fetal heart rate monitoring (EFM) is the primary tool to evaluate and suspect fetal distress. Is has, nonetheless, many limitations.

In the pressuring environment of maternity unit, are we correctly evaluating EFM? How does abnormal EFM correlate with newborn outcomes?

The primary purpose of this study is to evaluate the outcome of newborns that had a cesarean birth caused by fetal distress.

Materials and Method

Retrospective study of all women that had cesarean deliveries (singletons) between January-September 2014, motivated by fetal distress or equivalent (fetal bradycardia/tachycardia, deceleration of the FHR, non-reassuring EFM,…). The following aspects were evaluated: maternal age, gestational age, presence of active labor, EFM tracing characteristics, labor induction/conduction, newborn characteristics (weight, Apgar score [AS] at 1 and 5 minutes, neonatal intensive care unit [NICU] stay).

Results

Of the 45 cases initially included, 9 were excluded because fetal distress was only associated with ultrasound changes (8) and meconium (1) – not with EFM. Two more were excluded due to the inability to consult the registry of EFM – 34 remaining cases.

Median maternal age was 29,79±6,11 years. There were 14,7% preterm labors. When cesarean was performed, 47,1% weren't in labor; 23,5% had premature rupture of membranes but no cervix dilation; 17,6% were in the first stage of labor (3-7 cm dilated), 5,9% were 7-9 cm dilated and 5,9% were fully dilated. Half had labor induction/conduction.

According to the ACOG classification, there were 32,5% EFM category I, 44,1% category II and 23,5% category III.

Most newborns were male (64,7%), and the mean weight was 2940,91±498,17 grams. The AS at the first minute was ≤3 in 5,8% and >3-≤7 in 8,7%. Only one had <7 at the fifth minute – the only neonatal death, associated with a category III EFM. Additionally, there were 7 newborns needing NICU, for unrelated reasons (prematurity, sepsis, abstinence syndrome). All others were discharged at 72 hours.

The mean follow-up is 7,85±2,52 months; most (82,4%) returned to the hospital. None had any related problems.

EFM classification was statistically associated ($p<0.05$) only with AS at the first minute and gestational age.

Conclusion

There are several limitations with this study: small number of cases; limited follow-up; subjectivity in the evaluation of the FHR; and considering the EFM as single cause for decision making regarding delivery mode, without taking into consideration other relevant parameters (progression of labour, amniotic fluid characteristics, maternal characteristics).

Still, it demonstrates the importance of a focused and pondered evaluation of the EFM; and of not rushing into decisions, especially when the EFM tracing is not clearly pathological – without any adverse consequences in the newborn outcome.

Key words: Fetal distress, cesarean delivery, electronic fetal monitoring

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ECLAMPSIA – AN ATYPICAL CLINICAL CASE

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Introduction

Eclampsia is defined as convulsions in a woman with pre-eclampsia, which cannot be attributed to other causes. It is estimated to occur in around 0,05% pregnancies.

Although progressively scarcer, it still poses a difficult challenge; with the development of diagnostic, preventive and therapeutic techniques, more atypical forms will arise.

Materials and Method

A case of a 28 year old primigravida who developed intrapartum seizures, without any prior clinical or biochemical evidence of preeclampsia is presented.

Results

Pregnant nulliparous woman, of 36 weeks and 5 days, black ethnicity, with no relevant personal history. Pregnancy was accompanied in the hospital, without any complications except gestational diabetes since second trimester, controlled with diet.

The patient presents in the emergency room with preterm premature rupture of membranes, without cervical dilation, and is admitted to delivery room asymptomatic, normotensive and afebrile.

Three hours after admission, the patient has an episode of convulsions with mild tonic-clonic movements and salivation, maintaining sphincter control. After, she remains in a post-ictal state. During and after the episode, she remains normotensive, with good saturation in ambient air, and with reassuring electronic fetal heart rate monitoring.

Treatment with magnesium sulfate is started, and an emergent cesarean delivery is decided. Laboratory tests present changes consistent with HELLP Syndrome Class I (Mississippi).

The newborn is a boy with 3380 grams and Apgar Score 10/10.

Cesarean is complicated with uterine atony, which although resolved intraoperatively with uterotonics, recurs postpartum, with abundant blood loss. The patient refuses blood transfusions, due to religious beliefs. She becomes obnubilated, hypotensive, pale (hemoglobin 3,7 g/dL, hematocrit 11%), with oligoanuria.

It is then decided to perform a hysterectomy, which occurs without incident. After, the patient accepts blood transfusion (receiving 4 units of erythrocyte concentrate, 4 units of plasma, and 3 pools of platelet), achieving hemodynamic stabilization. However, she presents a commitment of ventilation/oxygenation (hypoxemic acute respiratory failure), and needs intubation. She is transferred to an intensive care unit, where she remains 4 days, intubated. Eleven days postpartum, the patient was discharged, clinically stable.

Conclusion

Although increasingly rarer, eclampsia remains a serious illness, needing immediate care. Particular aspects such as those presented in this case can hinder diagnosis and treatment, and increase the incidence of complications (such as pulmonary edema and postpartum hemorrhage).

Key words: Eclampsia, atypical eclampsia, case report

Presenter name: T. Esteves

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PERINATAL OUTCOME OF BORDERLINE OLIGOHYDRAMNIOS

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Introduction

Oligohydramnios is associated with a high rate of peripartum complications and a high perinatal morbidity rate. Our aim was to assess the perinatal outcome of cases with midtrimester borderline oligohydramnios without preterm premature rupture of membranes (PPROM).

Materials and Method

Our Hospital is a referral center for high-risk pregnancy. During the last five years (2009-2014) all cases with unexplained borderline oligohydramnios were reviewed. The age, parity, obstetric or medical history, investigations, treatment, mode of delivery and perinatal outcome were examined and found from the medical records. Only women with a diagnosis made before 34 weeks were incuded in the study. We excluded from analysis women with PPROM, fetal congenital anomalies, preeclampsia, fetal growth restriction, Potter syndrome, and maternal anti-inflammatory treatment.

Results

During the above mentioned period 23 women with unexplained (idiopathic) borderline oligohydramnios were found. The mean maternal age was 30.3 years. The mean gestational age at diagnosis was 29.6 weeks (range: 27-34 weeks). No other ultrasonographic findings were found in any of them. 19 women were hospitalized for more than a week, while the others entered the Hospital a few days before delivery. All hospitalized women were monitored with daily CTG and biophysical profile twice per week. The mean gestational age at delivery was 36.2 weeks (range 33-39 weeks). Eight women delivered with normal vaginal delivery and 15 others with an elective cesarean section. Eleven women were induced and six of them gave birth vaginally, while the other five with an emergency cesarean section.

Conclusion

Our experience with unexplained borderline oligohydramnios showed that the perinatal outcome was good, although a high cesarean section rate was observed. Close maternal and fetal surveillance and timely delivery, either by labor induction or by an elective cesarean section are necessary.

Key words: pregnancy, borderline oligohydramnios, perinatal outcome
Presenter name: G. Daskalakis

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DELAYED INTERVAL DELIVERY OF THE SECOND TWIN IN A WOMAN WITH MILDLY ALTERED MARKERS OF INFLAMMATION

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Introduction

Delayed interval intertwin delivery rates are expected to rise during the next years as antenatal surveillance becomes more competent in predicting adverse maternal and neonatal outcomes. We present a case of delayed intertwin delivery after delivery of the first twin due to PPROM.

Materials and Method

We report a case of delayed interval delivery of the second twin 34 days after the delivery of the first one.

Results

A 34-year old woman P1G2 was admitted in our high risk pregnancy Clinic at 23+4 weeks of gestation due to preterm premature rupture of the membranes (PPROM) of one of the dichorionic twins she had experienced 7 days ago. During physical examination she was normotensive, without fever and she had a Bishop score of 0. Laboratory examinations were obtained that revealed increased white blood cells (12,300/μl) and elevated CRP (40.98mg/L with upper normal laboratory limit of 1.0 mg/L), while vaginal and urinary cultures were normal. The patient was started on amoxicillin and metronidazole regimen three times daily for ten days and she was administered a course of betamethasone. Ultrasound examination revealed the presence of two embryos with positive cardiac function that weighted 535 and 606 grams respectively. Her cervical length was 28 mm. Three days later WBCs raised (14,200/μl) whereas CRP value declined at 2.90 mg/L. One week after admission (24+4) the patient experienced contractions and gave birth to a female infant weighing 550 g. Manual extraction of the placenta failed and we decided to ligate the umbilical cord just above the level of the external cervical os. She remained in the labour ward for close evaluation and as there were no signs of labour the woman opted for delayed delivery of the second twin following a detailed counselling. The next day the first twin died due to respiratory distress syndrome. Blood samples were obtained from the patient that revealed again raised WBCs (12,400/μl) and an increased CRP (13.14 mg/L). Five days later she had a new blood and urine examination along with urine cultures that revealed elevated WBCs (13.900/μl) an even higher CRP (31.78 mg/L) and the presence of enterobacteriae. The patient started cefuroxime 750mg three times a day for a period of seven days. The woman had close laboratory and clinical evaluation for signs of infection or fetal compromise. During the rest of her hospitalization her temperature remained constantly normal. A repeated dose of corticosteroids was administered to the patient during her 26th and 27th day of hospitalization (28th week of gestation). The second female fetus was finally delivered 34 days after the first one (29+2) with cesarean section due to an abnormal NST. The neonate weighed 1150 g and had an Apgar score of 7 at the first minute and 9 at five minutes. It was discharged from the neonatal ward 4 weeks later.

Conclusion

Close antenatal surveillance can lead to a successful outcome in cases of delayed interval delivery of the second twin, even in women with mildly elevated inflammation markers.

Key words: twin pregnancy, preterm premature rupture of the membranes, intertwin interval, delivery
Presenter name: G. Daskalakis

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DIFFERENCES BETWEEN EXPECTED AND UNEXPECTED PERIPARTUM HYSTERECTOMIES

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Introduction

Our aim was to present the different perioperative characteristics of expected and unexpected peripartum hysterectomies, in a university tertiary referral center.

Materials and Method

We retrospectively assessed all cases of peripartum hysterectomy at Alexandra maternity hospital performed between January 2008 and June 2013.

Results

A total of 22,437 deliveries were scanned during the study period and among them we identified 63 cases of peripartum hysterectomy (2.8 cases per 1.000 deliveries). 34 of them were considered expected peripartum hysterectomies, while 29 were unexpected hysterectomies. Significantly higher morbidity was observed in the unexpected group compared to the expected one (65.5% vs 29.4%) (p=0.004). Moreover, in the same group, blood and plasma transfusion rate, colloid and crystalloid administration rate, as well as operative and hospitalization time were all significantly higher. The need for hypogastric arteries ligation or embolization and for administration of recombinant factor VII was also higher in the unexpected hysterectomy group.

Conclusion

In cases of unexpected peripartum hysterectomy the total morbidity was higher than in expected cases. The need for additional measures to control hemorrhage was also higher in this group of patients.

Key words: obstetric hysterectomy, emergency, outcome
Presenter name: G. Daskalakis

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INTEGRATED MANAGEMENT OF MENTAL DISORDERS IN THE PERINATAL PERIOD

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Introduction

Improving maternal health is one of the key Millennium Development Goals. Mental health is one of the most important components of health. In Slovenia, mental health has had a special place for many years, because we stand out for our high suicide rate among many mental disorders and diseases. Mental disorders in pregnancy are often unrecognized and untreated due to the nature of the disorders, the unawareness of both professional and lay public, and stigmatization. An untreated depression during pregnancy results in postpartum depression in 50-62%, 15% of pregnant women with an untreated mental disorder try to commit suicide.

Materials and Method

Our research in 2011 showed the prevalence of depression in 21.7% of pregnant women, the proportion of depression during the trimesters did not differ. The incidence of postpartum depression in Slovenia was established in two targeted studies and their results are comparable to those of foreign studies. A research from 1987 showed that 33% of puerperas suffer from postpartum depression (21.5% in a mild form, 9% medium and 2.5% in a severe form). In the 2003 survey, the incidence of postpartum depression was 21.5 %; however, they did not specify their forms of severity. According to our data and data from abroad it could be implied that in 2012 there would be 4,300 puerperas suffering from postpartum depression, 1,400 of which would have the severe form.In the period from 2005-07 there were on average 33 (6.7/100,000) women of reproductive age that have committed suicide, 14 of which were between the ages 20 to 39 years old. This represents 15% of all deaths in this age group. In the EU countries the incidence of suicide during pregnancy decreased; quite opposite of the situation in the period after giving birth. Studying early maternal mortality rate (up to 6 weeks after the end of pregnancy) in the UK has shown that suicides dominated death rate at least as often as deaths due to hypertensive disease in pregnancy; furthermore, if the research also included late maternal deaths (up to 12 months after the end of pregnancy), suicide became the leading cause of death. Depression is the most common perinatal disorder, although pregnancy was in the past seen as a period of well-being for the majority of women that protected them against psychiatric disorders. Various foreign research reports on the prevalence of perinatal depression in 10 to 20% of women. In one-third to half of the cases the form of the disease is quite severe.

Results

Epidemiological studies have shown the importance of psychosocial and psychological variables in the etiology of perinatal depression. Interventions based on these variables may be an effective therapeutic strategy that can be used both during pregnancy and in the postpartum period for the prevention of postpartum depression. For an adequate and timely identification of women at risk for perinatal depression the use of screening test is quite sensible. Thus, gynaecologists during pregnancy and midwives after the labour most commonly use the Edinburgh Postnatal Depression Scale, which is used all around the world. Treatment during this period includes psychoeducation, the inclusion of family members, the use psychopharmaceuticals and psychotherapy. We decide on the manner of treatment on the basis of severity of depressive symptoms. Women usually choose psychotherapeutic measures. It was established that in the first year after childbirth all evaluated psychotherapeutic and psychosocial interventions (self-help groups, support groups, cognitive behavioural therapy, interpersonal therapy and psychodynamic therapy) were statistically significantly more effective than standard forms of treatment.

The University Medical Centre Ljubljana's Division of Gynaecology and Obstetrics has its own Clinical Psychology Service. In 2014 there were 589 women treated for the first time at our outpatient psychology Service, along with 150 returning patients. Women with identified mental disorders during pregnancy are treated multidisciplinary (by a gynaecologist, a clinical psychologist, psychiatrist, midwife, and doctors of

other specialties). The midwife present in the labour ward is involved throughout the pregnancy and during individual preparation for labour in all female patients with identified mental illness, mood disorders, tokophobia, history of sexual abuse and posttraumatic stress disorder after a previous labour.

Conclusion

In the near future we are planning additional trainings and the establishment of a network of experts in Slovenia for the treatment of perinatal depression and other perinatal psychiatric disorders. With the program of additional training we will equip health workers of different specialities with knowledge to identify risk factors for perinatal mental disorders, use screening tests for perinatal depression, and understand various therapeutic approaches to the treatment of perinatal mental disorders for their effective prevention, timely diagnosis and appropriate treatment.

Key words: mental disorder; pregnancy, multidisciplinary approach, treatment

Presenter name: ANITA PRELEC

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LEVELS OF IL-6 AND IL-8 IN CERVICAL AND VAGINAL FLUID IN PREGNANCIES COMPLICATED BY PRETERM PRELABOUR RUPTURE OF MEMBRANES

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Introduction

Purpose of the study: The purpose of this study is to determine concentrations of interleukin (IL)-6 and IL-8 in cervical and vaginal fluid in pregnancies complicated by preterm prelabour rupture of membranes and their correlation to microbial invasion of the amniotic cavity (MIAC) as well as histological chorioamnionitis (HCA).

Materials and Method

Methods: In this study were included sixty- eight women with singleton pregnancies. At the time of admission to the hospital, thev aginal and cervical fluid were collected and the concentrations of IL-6 and IL-8 were determined by using ELISA.

Results

Results: Levels of concentrations of IL-6 in vaginal fluid was higher in women with MIAC than in women without MIAC (with MIAC: median 374 pg/mL vs. without MIAC: median 174 pg/mL, p=0.03). The concentrations of IL-6 and IL-8 were the same in patients with or without HCA. In women, who had both MIAC and HCA was higher IL-6 vaginal fluid levels than in woment without MIAC and HCA (with MIAC and HCA: median 466pg/mL vs. without MIAC and HCA: median 178pg/mL, p=0.02). In women with HCA were tle levels od IL-6 in cervical fluid the same like in a group of women without HCA (p=0.37). The women with MIAC had higher IL-8 levels only in the crude analysis (p=0.01) but not after adjustment for gestational age (p=0.06). The women with both MIAC and HCA had higher cervical fluid levels of IL-6 and IL-8 than did the other women (IL-6: p=0.003, IL-8: p=0.001). The cervical fluid IL-8 level of 2653pg/mL was found to be the best cutoff point in the identification of PROM pregnancies complicated by both MIAC and HCA with lieklihood ratio of 24.

Conclusion

Conclusion: The presence of MIAC is the most important factor impacting the local cervical inflammatory response, which is determined by IL-6 and IL-8 levels in the cervical fluid. The cervical fluid IL-8 levels seem to be a promising non- invasive marker for the prediction of pregnancies complicated by the presence of both MIAC and HCA. Levels of IL-6 (but not IL-8) in vaginal fluid are typical for the presence of MIAC and both MIAC and HCA.

Key words: Preterm prelabour rupture of membranes, chorioamnionitis, microbial invasion

Presenter name: Petra Strasilova

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Clinical course of uterine rupture

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Introduction

Uterine rupture is associated with maternal and neonatal morbidity and the main risk factor is a previous cesarean section.

The aim of this study was to describe symptoms and course of labour preceding uterine rupture after previous cesarean delivery and to describe maternal and neonatal outcomes in relation to which stage of labour the rupture was diagnosed.

Materials and Method

Retrospective review of medical records and fetal heart rate tracings in women with a previous cesarean delivery having a complete uterine rupture (n=75) in their second labour.

Symptoms of uterine rupture and maternal and neonatal outcomes were assessed in relation to stage of labour; pre labour, first stage, second stage and the immediate postpartum period, in which rupture occurred. Management of labour was assessed by predefined criteria.

Results

Fetal distress (65.3%), abdominal pain (61,3%) and protracted labour (46.7%) were the most frequent symptoms preceding uterine rupture. One third of neonates had an Apgar score <7 at 5 minutes and 42 % had cord pH < 7.00. Postpartum hemorrhage ≥ 2000 ml occurred in 12.5%. Diagnosis of uterine rupture during the second compared to the first stage of labour carried a higher risk of adverse neonatal outcome (p=0.038) whereas diagnosis postpartum was associated with an increased risk of maternal complications (p= 0.015). Oxytocin was used in 71% of which less than half had progress of labour.

Conclusion

Neonatal and maternal outcomes depend on stage of labor where uterine rupture is diagnosed. The high frequency of injudicious use of oxytocin is of concern and needs to be highlighted among obstetricians in Sweden.

Key words: cesarean section, fetal distress, oxytocin, protracted labor, stage of labor, uterine rupture

Presenter name: Susanne Hesselman

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THE 10 GROUP CLASSIFICATION: UTILITY IN CLINICAL PRACTICE

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Introduction

10 Group Classification has been used in an attempt to improve maternity care, regarding the reduction of the caesarean rate. Furthermore, it has been useful for hospital auditing. Prospective application of this classification to all pregnant women in order to assess the likelihood of obstetric outcomes has not yet been studied.

Materials and Method

Descriptive retrospective analysis of all data concerning the deliveries occurred at tertiary referral center in 2014. Antepartum, all women were stratified by group according to the 10 Group Classification. Statistical analysis by group was performed regarding type of delivery, episiotomy rate and labor induction rate.

Results

In 2014, 2040 women were discharged after delivery. There were 921 normal deliveries (45,1%), 580 instrumental deliveries (28,4%) and 539 caesareans (26,4%). According to the 10 Group Classification: 555 (27,2%) women belonged to Group 1; 453 (22,2%) to Group 2; 399 (19,6%) to Group 3; 157 (7,7%) to Group 4; 180 (8,8%) to Group 5; 52 (2,6%) to Group 6; 28 (1,4%) to Group 7; 71 (3,5%) to Group 8; 3 (0,2%) to Group 9 and 142 (7%) to Group 10. There were 3 (5,8%) vaginal breech deliveries in Group 6, 4 (14,3%) vaginal breech deliveries in group 7 and 27 (38%) vaginal deliveries in Group 8. Groups 2 and 5 had a more significant contribution to the overall rate of caesareans (51,8%). Groups 1 and 3 a more significant contribution to the overall rate of normal deliveries (65,5%). Groups 1 and 2 a more significant contribution to the overall rate of instrumental deliveries (72,8%). The episiotomy rate was 79,4% (higher in Group 1 and 7, 93% and 100% respectively). The induction of labor rate was 26,2% (higher in Group 2 and 4, 76,6% and 75,2% respectively).

Conclusion

10 Group Classification when applied to all pregnant women may be useful in the analysis of obstetrics outcomes and for hospital auditing. Before delivery, the knowledge of the group to witch each women belongs may predict the type of delivery and the likelihood of episiotomy.

Key words: 10 Group Classification, type of delivery, induction rate, episitomy rate

Presenter name: Sara Vargas

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ISOLATED SINGLE UMBILICAL ARTERY: INTRAPARTUM FETAL HEART RATE TRACINGS

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Introduction

Fetuses with single umbilical artery are considered at increased risk for chromosomal and structural abnormalities and increased adverse perinatal outcome. This study aimed to evaluate intrapartum fetal heart rate (FHR) abnormalities and overall tracing classification of pregnant women with fetuses with isolated single umbilical artery.

Materials and Method

Women carrying full term fetuses with single umbilical artery that delivered at a tertiary referral center from 2011 to 2014 were included. Pregnancies complicated by chromosomal abnormalities and other congenital malformations were excluded as well as those undergoing elective caesarean section. All women were submitted to continuous monitoring during labor. Intrapartum tracings were classified according to ACOG/NICHHD/SMFM guidelines (last 60 minutes prior to delivery). Perinatal outcomes including type of delivery, newborn´s weight and Apgar score (1st and 5th minute), the need for neonatal intensive care and the umbilical artery pH were registered.

Results

10 cases were included. Two of them were classified as Category I, seven as Category II and one as Category III. Fetal heart baseline rate estimation was within the normal range in all cases. One case showed minimal variability and two had absent accelerations. Decelerations were indentified in 8 cases: six had variable decelerations, one had late decelerations and one had a prolonged deceleration. Two caesarean sections and one instrumental delivery were performed due to fetal distress. There was no need of neonatal intensive care.

Conclusion

Fetuses with single umbilical artery showed a high rate of fetal heart rate abnormalities. Continuous fetal heart rate monitoring and possibly some adjunctive technologies should be considered for obstetric management of these pregnancies.

Key words: Isolated single umbilical artery, intrapartum fetal heart rate tracings

Presenter name: Sara Vargas

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Bakri intrauterine balloon for postpartum haemorrhage. Experience in a Spanish tertiary care centre.

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Introduction

Postpartum haemorrhage (PPH) is a life-threatening perinatal complication. Enormous efforts are dedicated to reduce the number of surgical interventions (hysterectomy), especially in settings were arterial embolization is not available. Bakri intrauterine balloon is a minimally invasive device that can control the bleeding while avoiding the fearsome puerperal hysterectomy and preserving future maternal fertility.

This study aims to describe a group of patients who required the placement of a Bakri intrauterine balloon to control a PPH refractory to medical initial treatment.

Materials and Method

It is a retrospective cohort study of obstetric patients in whom a Bakri intrauterine balloon was used to control a PPH, collected during a period of six years in a tertiary care centre. Success rates and need of secondary procedures are calculated. Clinical data have been extracted from clinical records after obtaining patient informed consent. Longitudinal follow-up was conducted to present. In all patients, Bakri balloon was considered only after failure of medical treatment consisting on vigorous uterine massage, birth canal evaluation and reparation (when needed), and use a combination of uterotonic agents, including oxytocin, ergometrine and prostaglandins. Occasionally, curettage was performed before balloon placement. Balloons were placed vaginally if PPH occurred after vaginal delivery, and abdominally after caesarean section, following manufacturer instructions. Echographic guidance was routinely performed. In successful cases, balloon was deflated gradually after 24 hours. All patients received antibiotic prophylaxis and a urine catheter was placed to allow correct micturition.

All relative frequencies, means and ranges have been calculated using the software SPSS 19.0 for Windows.

Results

During the study period of six years (2009-2014) a total of 35533 deliveries were attended in our centre, with a total of 36665 new-borns. During this period, a total of 60 balloons were placed due to PPH not controlled with medical treatment, which represents a 1,6 ‰ of all deliveries. In this group, the mean age was 33 years old, and 50% of them were Spanish, with another 30,4% of Latinas. 73,3% were primiparous. 11,7% had a history of previous caesarean delivery, and a further 35,7%, a history of uterine surgery or curettage. A 36,7% of patients did not presented any a priori risk factors of PPH. The most common a priori risk factors were: multiple pregnancy (20%), and placenta previa (13,3%). It is relevant to say that most of the patients (82,4%) that needed such an intervention presented any pregnancy complication, being the most common ones the advanced maternal age (14,7%) and preeclampsia (10,3%).

Mean gestational age at delivery was 37 weeks. From all deliveries within the group, 47,5% finished via caesarean section, whereas 52,5% proceed vaginally. A 36% of deliveries were induced with prostaglandins. The most common indication for induction was prolonged gestation. In the C-section group, the most common indication was the placenta previa and the loss of fetal wellbeing.

From all PPHs, 91,7% were primary (occurring less than 24 hours after delivery). The most common cause for hemorrhage was uterine atony (63%), followed by retained placenta or placental tissue and placenta previa. Mean haemoglobin level before delivery was 11,4 g/dl. Calculated hematic loss was between 1000 and 2500 ml. Haemoglobin level after bleeding ranged between 4,1 and 11,5 g/dl, with a mean of 8,4 g/dl. An 81% of patients required reposition of blood products, with a mean requirement per patient of 5,8 bags of packed red blood cells, 1,7 platelet packs, 3,5 fresh frozen plasma units and 2,7 grams of fibrinogen. 22% of patients required transfer to the central Intensive Care Unit.

Balloon placement success rate was 65%. The remaining 35% cases account for 2 cases in which was not possible and a balloon expulsion after placement, and also all cases in which balloon was not successful in stopping bleeding and additional measures were needed (uterine artery embolization, hypogastric arteries ligation and/or hysterectomy). 93% balloons were placed vaginally. Mean saline infusion into the balloon was 284 ml. Mean maintenance time was 18,5 hours (after the initial 24 hours). Mean length of stay was 41 days, the longest stays representing especially complicated cases as a malign melanoma diagnosed pre-delivery or refractory puerperal hypertension.

During the follow-up period, 16,3% of patients had a consecutive uncomplicated pregnancy.

Conclusion

Intrauterine Bakri balloon tamponade is a second stage procedure to successfully treat PPH. It is easy to perform, minimally invasive and faster than arterial embolization or puerperal hysterectomy. It should be considered in after medical treatment in all settings, as it does not need any especial infrastructure and learning curve is fast.

Key words: Bakri intrauterine balloon; postpartum hemorrhage; puerperium; perinatal complications; placenta previa

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Fetal Death in prodromal labour

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Introduction

38 – year- old woman with a previous pregnancy interruption and heterozygous factor V Leiden. She has A positive blood type. A second trimester morphology ultrasound examination confirmed bilateral mild ventriculomegaly in fetus.

Materials and Method

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Results

A woman who was 39 weeks and 5 days pregnant was admitted to hospital in prodromal labor.

The number of white blood cells in blood test was higher than normal.

First fetal non-stress test was satisfactory. After four hours, the non-stress test was repeated being impossible to hear the baby's heartbeat.

By echography, prolonged fetus bradicardia was confirmed. An emergency cesarean delivery was performed getting a 3730 grams of birth weight to kilograms male fetus with 0/0 Apgar score and no signs of life. Moderately meconium-stained amniotic fluid drawn out of the mother´s abdomen. After almost than hour of unsuccessful resuscitation efforts, fetal death was confirmed. Placenta and umbilical cord with no signs of abnormalities.

Conclusion

The incidence of intrapartum fetal death is much smaller than the antepartum stillbirth.

The causes of intrapartum stillbirth reside in fetal causes (arrhythmias, syndromes and chromosomal abnomalities ...), placental (abruption, vasa previa, umbilical cord accidents ...) and maternal factor (age, obesity ...). In this case, necropsy study find out antepartum fetal anoxia as probable cause of fetal death.

Key words: fetal death, prodromal labour,

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Characteristics of pregnant women with a fetal growth restriction fetus

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Introduction

A constitutionally small fetus achieves its normal growth potential and has a good prognosis, whereas the fetus whose growth potential is restricted is at increased risk of perinatal morbidity and mortality.

More than a half of fetuses whose weight is below the 10 th percentile for gestational age are small simply because of constitutional factors such as female sex or maternal ethnicity or parity. They are not at high risk of perinatal mortality or morbidity.

Materials and Method

We have designed and carried out an observational descriptive study for a year (from 1st January 2014 to 31 st December 2014). Significant problems remain in terms of defining the population of growth restricted fetuses. We have analyzed the characteristics of pregnant women whose fetuses have been diagnosed with a growth restriction. We have defined a population of 205 fetuses, which represents 8 % of births (2551).

Variables studied in research are maternal ethnicity, gestational age, apgar score, arterial and venous umbilical cord pH value and fetus weight.

Results

In our study, 25 % of pregnant women are from the Maghreb, 53 % are from Spain and the rest come from different countries from Eastern Europe, South America and South Africa.

The average gestational age was 38 weeks and 2 days and the average age of pregnancy was 33 years old.

With regard to parity of women, 35 % of them were multiparous and 65 % were nulliparous.

Regarding apgar score done at one, five and ten minutes after birth, the average was 9/10/10.

In relation to umbilical cord pH, the average of arterial pH was 7,10 and venous pH was 7,16.

The average fetal weight at 37 weeks was about 2161 grams. It was about 2585 grams at 39 weeks and about 2754 grams at 41 weeks of pregnancy.

Conclusion

Differences in maternal characteristics including age, parity, race, ethnic and background are related with a high incidence of fetal growth restriction.

Key words: maternal characteristic, fetal growth restriction

Presenter name: A. Astorga Zambrana

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Anxiety Levels and Influencing Factors During Labour in Pregnants

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Introduction

Pain, fear and anxiety triangle during labour is one of the factors effecting mode of delivery. Labour is a process causing anxiety and stress, and affecting pregnants and and their families. Anxiety is an obstrusive sense of worriment and fear that is life threatining or is discerned as a threat. The sense of anxiety that pregnant feels in labour may lead odyophobia, loss of control or maternal or fetus to be damaged. Among the studies conducted in recent years it can be said that three factors are generally efficacious in the grip of anxiety during labour. The first one is practices of healthcare professionals, the second one is behaviours of woman herself and the latter is past experiences and satisfaction degree of these experiences.

Materials and Method

Aim: The aim of the research is to determine anxiety levels and ınfluencing factors during labour in pregnants.

Design and Setting: This is a cross-sectional and analytical research. It has been conducted in a public hospital in İzmir/Turkey. The women applied to delivery room composed the population of the research (n=9841). By using Statcalc (EpiInfo Version 6), minimum sample size that is to be taken is in the confidence interval of 95% and it has been determined as 310 pregnants with 29.6% prevalence and 5% error margin (in the research conducted by Field and et al (2006), it is stated that the 29.6% of expectant mothers suffering depression Express that they are stressful in gestation). The pregnants taken into the sample group have been designated through prospectless sample selection method and all the women that are volunteers to participate in the study have been included to the study. The research data has been gathered a question pregnant survey form developed with literature review by the reserchers and with State Anxiety Scale. State Anxiety Scale consists of 20 statements. The score value obtained from the scale can show an alteration between 20 and 80. High score represents anxiety level heigth while low score represents looseness of anxiety level.

Ethics: For the research, a written consent has been received from the hospital administration and verbal consents have also been gained from all the women participating into the research.

Analysis: Data analysis has been done by using SPSS program. Percentage and number distribution has been held, means has been given with standard error and t test analysis have been kept in independent samples.

Results

In the research it is assigned that 53.4% of the pregnants are in the group of age 20-29. Moreover 78.2% of gestations are planned pregnancies. 62.4% of pregnants (n=247) have labour experiences, and it is determined that 46.1% of them are deliveries by caesarean section while 35.0% of current labours are vaginal delivery. It is stated that 94.0% of pregnants feel ready to maternity, 79.3% of them take most of support from her spouse in this period and 46.6% of them evaluates labour as a stressful but happy, 56.6% of pregnants define tehmselves as worried when they are asked how to feel in delivery room. 52.5% of them defining themselves as worried have stated that they fear their children to be hurt. State Anxiety Score Average of pregnants is determined as 49.76±10.62 (Min: 25.00, Max:75.00). After labour starts, 62.4% of pregnants are ascertained that they have medium anxiety (40-59 scores) when they are in delivery room. Besides from the variable-questionned, a statistically difference is found between state anxiety scores in the pregnants who don't have any information about labour during her gestation, is married for 2 years or less than, becomes pregnant without using assisted reproductive technique, have no labour experience, have abortion ($p<0.05$).

Conclusion

According to research results, the determination of anxiety level of the women applying to hospital for labour and overcoming the problems stemming from anxiety in the way the person can be effected less are essential for support factors and providing to reach to these factors.

Key words: Labour, Pregnant, Anxiety.
Presenter name: Hafize Ozturk CAN

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TISSUE FACTOR ACTIVATION IN PREGNANCY COMPLICATIONS

Eliska Hostinska

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Introduction

TF is a specific and high-affinity receptor for factor VII/VIIa and acts as a cofactor for Factor VIIa. Exposure of activated TF in coagulation system triggers the physiological blood coagulation and thrombosis in a number of thrombotic diseases. Analysis of changes in expression of tissue factor inhibitor, including with regard to their impact on the initiation of activation of coagulation changes that can lead to pregnancy complications in healthy pregnant women compared with pregnant women treated for chronic hypertension, diabetes mellitus and preeclampsia.

Materials and Method

We have proposed a model monitor activation of the coagulation system in preeclampsia and other pregnancy complications with TF expression on monocytes by flow cytometry and simultaneously fixing the TF -induced thrombin generation in plasma. To determine expression of tissue factor (CD142) on monocytes, we used the method of multicolor flow cytometry using anti CD45 PerCP, clone MEM -28, anti CD14 APC clone MEM -15, CD16b FITC clone MEM -154, anti CD142 PE and the appropriate isotope control. Peripheral blood of 198 prospectively monitored pregnant patient with signed informed consent have been analyzed. Test were done at the beginning of pregnancy - up to end the first trimester. The second collection was done in the period 24 to 28 week, the third sample after the 36th - 40th weeks.

Results

We have confirmed higher expression of CD142 and CD 14 (TF) and monocytes in patients with developed preclampsia compared to healty controls ($P<0.01$).

Conclusion

The detection of CD142 expression by flow cytometry seems to be an effective method of monitoring the activation of the coagulation system and methodology developed appears to be very promising for further uncovering the mechanisms of preeclampsia and conditions associated with it.Supported by the grant of the Min. of Health of the Czech Rep. NT 14394-3/2013

Key words: Antibody, Monocytes, Preeclampsia, Tissue Factor

Presenter name: Eliska Hostinska

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Spontaneuos preterm birth with and without premature rupture of membranes: mode of delivery and immediate neonatal outcomes

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Introduction

Preterm birth is a leading cause of perinatal morbidity and mortality in occidental world, representing a major problem for modern obstetrics due to its increasing frequency and the accompanying impact. Preterm has classically been categorized according to its clinical presentation: spontaneous preterm labor, preterm premature rupture of the membranes and medically induced (due to maternal or fetal complications).
Objective: To evaluate the mode of delivery and immediate neonatal results, over a decade, in spontaneous preterm birth with and without premature rupture of membrane (PROM).

Materials and Method

Retrospective analysis of preterm deliveries occurred in our unit between 2003 and 2012. Primary outcome variables were categorized into spontaneous preterm birth without or with PROM. The mode of delivery, their characteristics and neonatal outcomes were analyzed in each group.

Results

Of the 1432 spontaneous preterm births analyzed, 596 were spontaneous and 836 after PROM. Gestational age at delivery was 34±3vs34±2 weeks. Labor was induced in 0,5%vs17,1% ($p<0,001$) mostly using dinoprostone (33,3% vs 88,8%) or oxytocin (66,7% vs 6,3%) ($p<0,001$). The delivery was by cesarean in 18,5% vs 31,3% ($p<0,001$). The main reasons for the cesarean was fetal distress (20,9% vs 31,4%), failed labor induction (0,0% vs 14,3%), feto-pelvic disproportion (5,5% vs 3,5%) and other reason (59,1% vs 43,4%) ($p<0,001$). Neonatal morbidity was: globally 16,2% vs 12,2%, neurologic 4,7% vs 2,8% and respiratory distress syndrome 15,8% vs 12,7% ($p<0,001$). The mean number of days from hospitalization to birth was 1,3±4,9 vs 2,2±6,4 ($p<0,001$).

Conclusion

Spontaneous preterm birth with PROM presented higher induction and cesarean rates, but less neonatal complications than those without PROM.

Key words: preterm birth, premature rupture of membranes

Presenter name: Rita Medeiros

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Efficiency of ultrasound vs. combined screening in the detection of fetal chromosomal defects in the first trimester

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Introduction

Prenatal screening determines, noninvasively, the risk of fetal aneuploidy. The objective of this study was to evaluate the efficiency of ultrasound vs. combined screening in the detection of fetal chromosomal defects in the first trimester of pregnancy.

Materials and Method

Retrospective analysis of the clinical files of singleton pregnancies with increased risk of fetal aneuploidy in the 1st trimester, in our unit, between january 2011 and april 2014. Two groups were considered: A- nuchal translucency (NT) thickness above the 95th centile and B- combined screening positive (with normal NT).

Results

The study included 149 pregnant women, 76 in group A and 73 in group B. The mean maternal age was 32,87 [21-41] and 34,88 [24-46] years, being the first pregnancy in 46,1% and 35,6%, respectively. In group A 71 patients underwent invasive technique - 46 amniocentesis and 25 chorionic villus sampling (CVS) (2 refused and 3 had spontaneous abortions before the technique) and 8 cases of trisomy 21, 2 of trisomy 18 and 1 DiGeorge syndrome (15,49% of chromosomal abnormalities) were detected. In group B, 69 patients underwent invasive technique - 51 amniocentesis and 8 CVS (3 refused and 1 was not performed by technical impossibility caused by a large myoma) and 4 cases of trisomy 21, 1 of trisomy 13 and 1 karyotype 46, XY, del (15) (p11.2) (having the father the same karyotype) (7,24% of chromosomal abnormalities) were detected. In all cases of trisomy the patients requested medical termination of pregnancy.

Conclusion

In group A were detected twice as many cases of chromosomal abnormalities than in group B, validating the high accuracy of ultrasound screening and its higher detection rate. In group B, the change in biochemical markers accounted for a smaller number of detected cases, however is not to disregard the validity of screening.

Key words: ultrasound screening, combined screening, chromosomal abnormalities

Presenter name: Rita Medeiros

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INDUCTION OF LABOUR WITH PROSTAGLANDIN E2 IN PREGNANT WOMEN WITH PREVIOUS CESAREAN DELIVERY. ANALYSIS OF OUR HOSPITAL COHORT.

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Introduction

Uterine rupture is the most serious complication for women undergoing induction of labor after prior cesarean delivery. The best method for induction of labour in these patients has not been established yet. The aim of this study is to evaluate the safety and efficacy of pharmacologic labour induction with Dinoprostone (PGE2) and perinatal results in women with previous cesarean delivery and posterior singleton pregnancy. In addition, we will like to evaluate this method as a useful technique that could reduce the risk arising from elective cesarean section in this group of patients.

Materials and Method

We performed a retrospective study of women with previous cesarean delivery in which labor was induce with PGE2 in Hospital Universitario Gregorio Marañón between January 2012 and December 2013. The method used to induce labor was a slow release vaginal PGE2 insert.

Inclusion criteria were singleton pregnancies, one previous cesarean delivery with transversal incision in the uterus, no other uterine surgeries and Bishop Score < 6. Exclusion criteria were previous myomectomy, 2 or more previous cesarean deliveries, T incision in the uterus, previous uterine rupture and presence of any indication for elective cesarean delivery. From all patients informed consent was obtained. Maternal variables included were: age, nationality, previous vaginal delivery. Perinatal variables included were: gestational age, birth weight, umbilical artery ph, type of neonatal resuscitation, Apgar score at first minute and after five minutes.

Dinoprostone vaginal insert was placed in the vagina after 30-45 minutes of cardiotocogram. After 12 hours, if labor has not yet started, vaginal insert was removed. After another 12 hours, a second attempt of induction was carried out with artificial amniotomy and Dinoprostone.

We describe the rate of vaginal delivery, the type of delivery in relation with the indication of the previous cesarean section, the complications that appeared during the procedure and perinatal results.

Results

During the study period, a total of 10528 patients gave birth in our center. From the total of births, 823 women (8.1%) with one previous cesarean delivery were identified. In this subgroup of patients, induction of labour with PGE2 was performed in 151 women.

The mean maternal age was 33 years. Seventy-six percent of patients were Spanish. Fourteen percent of patients were multiparous women with at least one previous vaginal delivery as well as one previous cesarean delivery. The mean gestational age was 39 weeks with a mean birth weight of 3298 g and a mean umbilical artery ph of 7.27. In 4.7% of the newborns, at least type III neonatal resuscitation was necessary. Apgar score at first minutes less that 7 was present in 4 % of newborns and after five minutes 0.7% presented an Apgar score less than 7.

From the total of women induced with PGE2, 94 patients (62.2 %) gave birth vaginally and 57 patients (37.8%) gave birth by cesarean section. The indications for cesarean section were: failure of induction (37%), cephalopelvic disproportion (19%), fetal distress (12%), failure to progress (12%), revocation of vaginal birth (7%), maternal pathology (2%) and fetal malposition (2%).

The risk of a second cesarean delivery is higher in women in whom the indication of the first cesarean section was cephalopelvic disproportion, failure of induction and failure of progress. In this subgroup of patients, the rate of vaginal delivery was 57.4%. The indications of previous cesarean sections with a higher rate of vaginal delivery in induction were fetal distress (70.2%) and fetal malposition (68%).

During the procedure, one major complication was registered. There was one case of uterine rupture that was confirmed during the cesarean section. The newborn presented hypoxic-ischemic encephalopathy and was treated with active hypothermia. Long-term follow-up revealed normal neurological development.

Conclusion

Clinical evidence of induction of labor in patients with previous cesarean section has not been evaluated correctly as there are no clinical trials that evaluate maternal and perinatal results in comparison with the realization of elective cesarean section.

Induction of labor in this group of patients presents a higher risk of uterine rupture in comparison with spontaneous beginning of labor. One prospective and well-designed study in a big cohort estimated an OR of 2.86 (CI 95%: 1.75-4.67). The best method for induction of labour in these patients has not been established yet. In our study, there were no statistical differences in uterine rupture in women induced with PGE2 versus other methods of induction. Most of the international guidelines advise against the use of prostaglandins as inductors of labor as they present a higher risk of uterine rupture. Despite our small cohort of patients, we cannot agree with these guidelines as our results show acceptable maternal and perinatal results. In our cohort, there was only one case of uterine rupture with concurs with the numbers published in other studies (< 1%).

The rate of vaginal delivery in our study was 62.2%, which concurs with the data published in the literature. We consider this percentage an important piece of information that should make us think about the efficacy of this technique and the need of more well-designed prospective studies in this field. We believe that this technique decreases the risks that derive from the realization of elective cesarean delivery.

No statistical differences were found between patients with previous cesarean delivery when we compared those in which labor was induced versus those in which labor started spontaneously. There were some indications for the first cesarean section (cephalopelvic disproportion, failure of induction and progress) that increase the risk of a second cesarean section. In this subgroup of patients, the rate of vaginal delivery was 57.4 %, which we believe is worthy of consideration.

In conclusion, induction of labor with PGE2 in women with previous cesarean delivery is an effective strategy with a rate of vaginal delivery around 62.2 %. Due to the high rate of success and the low risk of uterine rupture we recommend this technique as vaginal delivery has important benefits for both the mother and the baby. Currently, there is not enough information from randomized control trials to establish strong clinical decisions in relation to the ideal method of induction in patients with previous cesarean delivery.

Key words: induction of labor, previous cesarean delivery, vaginal birth

Presenter name: Duna Trobo

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HOW TO APROACH PLACENTA PERCRETA - A CASE REPORT

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Introduction

Placenta percreta occurs when placenta invades and is inseparable from the uterine wall. Occasionally, it can invade adjacent organs, such as the bladder.

The major risk factor is placenta previa with a previous cesarean section delivery. This condition is rising, primarily because of the increase in cesarean delivery rates, but also advancing maternal age. It can be associated with life-threatening maternal haemorrhage and large-volume blood transfusion.

Materials and Method

Retrospective analysis of clinical process.

Results

43 year-old woman, caucasian, healthy, multiparous (2 cesarean section). Was referred to our Department by history of fetal death at 35 weeks (placental insufficiency). Gestational diabetes was diagnosed during the 2st trimester, and metabolic control was achieved with insulin.

During morphological ultrasound, were diagnosis a complete placenta previa, who presented heterogeneous, with multiple placental lakes, with sonographic signs of placental accretism, suspected of reaching the posterior wall of the bladder. The ultrasound was repeated at 28 and 32 weeks, keeping the same clinical suspicion.

For differential diagnosis was held magnetic resonance imaging. It was confirmed the diagnosis of placental accretism in anterior and inferior topography, however, has not been unequivocally the presence of placenta percreta, as well as the achievement of the bladder wall.

At 34 weeks she was hospitalized for maternal and fetal surveillance and delivery schedule. Was evaluated by a multidisciplinary team, including obstetrician, gynecologist, anesthesiologist, urologist, general surgeon, internist, and immuno-hemotherapy. Was reserved spot in the intensive care unit for the post-operative period.

At 37 weeks, we proceeded to cesarean section followed by hysterectomy with the placenta left in situ. It was confirmed the diagnosis of the placenta percreta, with a partial invasion of the serosa of the bladder wall. The surgery took place without immediate complications. In the first 24 hours post-operative, it was necessary to re-operate for hypovolemic shock. It was found haemoperitoneum , and proceeded to the revision of hemostasis.

She was admitted to the intensive care unit, performed hemoderivatives transfusion, prophylactic antibiotic therapy, and prevention of venous thromboembolism. In the 4th post-operative day, was transferred to the puerperium, remaining always stable and without further complications. Went home on the 8th day of puerperium, clinically well.

Conclusion

The key to a successful outcome is a multidisciplinary approach, appropriate communication, and early planning, in an attempt to minimize potential maternal or neonatal morbidity and mortality. To make it happen, is crucial pre-natal diagnosis.

Surgical management should be individualized. In this case, given the maternal age, multiparity and the hemorrhagic risk associated with placenta percreta, it was decided a planned cesarean section followed by hysterectomy with the placenta left in situ., in order to reduce the hemorrhagic morbidity.

Key words: Placenta Percreta, Hysterectomy, Postpartum Hemorrhage

Presenter name: Daniela Pereira

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LABOR EXPECTATIONS AND FEARS ASSOCIATED WITH CHILDBIRTH

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Introduction

Fears of pregnancy and labor have been observed in 20-78% of the pregnant women. When the fear of childbirth is not diagnosed and managed properly then it causes not only negative labor experience but also it affects preferring elective caesarean section. This research is aimed to determine fears of childbirth and labor expectations of the pregnant women.

Materials and Method

This research is a cross-sectional defining research. The study population consisted of 1384 pregnant women who admitted in gynecology and obstetrics unit of the university hospital during the last one year. The smallest sample size required to be taken into the research has been calculated as 209 (by using Statcalc-EpiInfo Version 7, 95% confidence interval, fear of childbirth frequency is 20%). A total of 239 pregnant women having no caesarean section before, during their last control, and pregnancy being 36 weeks and over have been included in the study.

Data has been gathered with interview between the dates September 2012 and November 2013. Socio-demographic and obstetrics features were obtained, and the Wijma Delivery Expectation/ Experience Questionnaire (W-DEQ) has been applied. The adaptation of the scale in Turkish language has been done by Körükçü and Kukulu (2008). The answer of the scale has been numbered as 0 to 5. Maximum point is 165. W-DEQ points is classified under four sub-groups such as those having low degree fear of childbirth (≤37 point), middle degree fear of childbirth (38-65 points), high degree fear of childbirth (66-84 points), and those having clinical degree fear of childbirth (≥ 85 points).

Results

Mean age is 27.41±4.33 and the education level is university in 48.1% of women. 80% of the participants have already stated their predetermined mode of delivery; 69.1% of them stated vaginal delivery, while 10.9% stated caesarean section. 71.5% of the women have stated that they received information about delivery methods during their pregnancy period. According to W-DEQ scale, 17.2% of participants have experienced low level fear of childbirth, 39.3% middle level, and 30.5% high level. The remaining 13% had clinical degree fear.

Conclusion

It has been determined that pregnant women have had considerable amount of fear of childbirth during pregnancy.

Key words: Fear of childbirth, Labor method, and Labor expectation
Presenter name: Nazan Tuna Oran

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Eclampsia and leporine lip: an infrequent association

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Introduction

Arterial hypertension is a frequent disease among pregnant women; this disease is called preeclampsia if the hypertension is associated with pregnancy, proteinuria and generalized edema. When there is a chronic arterial hypertension aggravated by pregnancy, there can be a superimposed preeclampsia, which can evolve to convulsing or comatose eclampsia.

Materials and Method

A 38 year old patient, from Moroccan origin with no relevant medical history, with a normal first birth and pregnant with second child. Second pregnancy is being monitored for high risk of fetal malformations.

Results

During the first trimester there is a pulse index of uterus arteries of >P95 therefore acetyl acid 100mg is prescribed daily. In morphological echography at 20 weeks, we can observe incomplete fusion of the maxillary and we observe bilateral leporine lip. Bi-weekly echography controls were done to address fetal growth.

Admission into hospital occurs at 35 weeks gestation due to alterations of the arterial tension and edema of lower extremities along with an alteration of the proteinuria values in urine. Cervical maturation with prostaglandins is done. The patient is administered intravenous oxytocin for childbirth induction and there is a constant monitoring of arterial tension. After 5 hours of induction, the patient suffers convulsions due to high arterial pressure of up to 180/110mmHg. Urgent cesarean section if performed due to risk of wellbeing of the fetus. A female fetus is born, 2500g, APGAR 5-7-8 with a diagnosis of bilateral leporine lip with hard and soft palate.

Conclusion

In the immediate post-operative the patient evolves well thanks to the antihypertensive therapy along with magnesium sulfate. The patient is discharged from the hospital after 15 days with good arterial tension values and with no clinical repercussions. The newborn is monitored by the Pediatric service after intervention for the leporine lip.

Currently there are no preventive methods for leporine lip it is important for all pregnant women to undergo the appropriate controls, specially the early controls. Although the final pathology of the disease is unpredictable in the majority of cases.

Key words: eclampsia, leporin lip
Presenter name: MR. Meca

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Study on perinatal morbidity and mortality in instrumental childbirths: Our experience at Hospital de Poniente de Almería (Almería, Spain)

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Introduction

We aim to understand the perinatal characteristics of the fetuses born with through births involving Kielland forceps, Thierry's spatula or through suction pads.

Materials and Method

We performed a descriptive retrospective study of all the fetuses who had an instrumental childbirth in the Hospital de Poniente of Almeria (Almeria, Spain) during the last trimester of 2013. We analyzed the following variables: sex of the baby, birth weight, APGAR, type of revival performed, umbilical cord arterial and venous pH, neonatology services and immediate puerperal breastfeeding.

Results

From a total of 98 fetuses born within this period of time, 57.14% were males and 42.85% were females. The average weight of the fetuses was 3,273gr, with a 10.20% of the fetuses being macrosoma and only a 4,08% having a weight under 2500gr. IN 96.93% of cases the APGAR value in the first minute of live was above 7 and the arterial pH in the umbilical cord was acidotic ph in 4.08% of the fetuses. A 11,22% of the cases were admitted to the neonatology department and a 88,77% stayed with their mothers. In a 73,46% of all cases, puerperal breastfeeding was initiated immediately. 59,18% of the fetuses did not require any type of revival, a 31.63% required type I revival, 6,12% required type II and 3.06 required type III.

Conclusion

The fetuses born with an instrumental childbirth at the Hospital de Poniente de Almeria tend to be males, with a birth weight higher tan 3000g, with a APGAR above 7 (in the first minute of life), does not require any type of revival technique and starts puerperal breastfeeding immediately.

Key words: Perinatal morbidity
Presenter name: C. Navarro

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Parity as a risk factor for dystocic childbirth

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Introduction

Dystocic childbirth is a frequent complication during delivery with perinatal consequences that can range from small lesions to brain damage. There are several factors associated with this complication, among them is being nulliparous. This study was done to determine if, in El Hospital de Poniente de Almeria, parity is a risk factor for an instrumental childbirth.

Materials and Method

We performed a retrospective study of 2551 deliveries that occurred during 2014 in the Hospital de Poniente de Almeria (El Ejido, Almeria, Spain). Only distotic childbirths were selected and a detailed analysis of type of instruments used in each one was done. Parity was assessed only among natural childbirth.

Results

Of the 2551 childbirth that occurred during 2014, 307 (12.03%) were instrumental. Of the instrumental childbirth 200 (65.14%) were done with suction pad, 83 (27%) were done with spatula and 24 (7.81%) were done with fórceps. Of the instrumental childbirths, 127 (41.36%) were done in primiparous women and 180 (56.63%) were done in multiparous women.

Among the instrumental deliveries with suction pad, 80 (40%) women were primiparous and 120 (60%) were multiparous. Among the instrumental deliveries with spatula 36 (43.37%) women were primiparous and 47 (56.62%) were multiparous. Among the instrumental deliveries with fórceps, 11 (45.83%) of women were primiparous and 13 (54.16%) were multiparous.

Conclusion

In our experience at the Hospital de Poneinte en Almeria, instrumental childbirths are more common among women who have already had a vaginal childbirth; this contradicts the existing literature that states that being nulliparous is a risk factor for a dictotic? Birth.

Future studies should analyze the mothers age, the height, child delivery duration and the newborns weight to determine if they have an influence in dystocic childbirth.

Key words: Dystocic childbirth

Presenter name: A. Astorga

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Diagnosis and management of HELLP syndrome: A case study

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Introduction

33 year old patient, pregnant with second child at week 37 of gestation, with no relevant medical incidence, only a cesarean delivery in 1999 due to a no-progression childbirth. The current pregnancy presents with a normal evolution, with biochemical screening in the first trimester with values of low risk and the 20-week echography with no relevant findings.

Materials and Method

We present the clinical case:

Results

During pregnancy the patient is check-in to the OBGYN clinic due to high arterial tension and high levels of cytolysis (GOT and GPT) without colestatisis, no proteinuria or abnormalities in the glomerular filtration. After 7 days in the hospital the medical team decides to induce childbirth with intravenous oxytocin due to proteinuria and elevated TA levels. Childbirth was finalized with cesarean section due to failure of induction. Male fetus was born with 3400g, APGAR 9-10.

During the immediate postoperative period there is a rapid decrease of hemoglobin, tachycardia and hypotension; two concentrates of red blood cells were transfused and the patient was sent to Intensive case. Shortly after the patient suffers extreme bradicardia and hypotension. Hemorrhage through the vagina is observed; uterine massage is performed along with administration of uterotonic drugs. Analytic tests reveal cytolysis patterns with increasing LDH (5430UI/L) associated with trombopenia (40000/ul) and increase bilirubin, all compatible with HELLP syndrome with severe anemia (hb 6.5g/dl) and arterial tension 40/30mmHG. Total Hysterectomy is urgently performed due to failure of pharmacological treatment and hypotonic subinvolutioned uterus.

During the time in Intensive care (30 days) the patient is diagnosed with HELLP syndrome, post-transfusion coagulopathy, acute renal failure with diuresis, acute plurietiologic pulmonary lesion that requires traquetomy, severe hemorrhagic shock, post reperfusion syndrome, distributive shock, ventilation failure and nosocomial pneumonia due to positive Klebsiella Blee.At discharge the patient is conscious, with no neurological deficit, with oral tolerance, closed traquetomy and no life support. In follow-up visits the patients is asymptomatic.

Conclusion

The main objective when treating HELLP syndrome is hemodynamic stabilization of the women and consider the wellbeing of the fetus to determine the termination of pregnancy. The incidence of HELLP disease is 30% among puerperal women. There are severe consequences both for the mother and for the fetus. As observed in this case, the risk of recurrence in subsequent pregnancies is 27%. It is essential to stress the importance of early detection of the HELLP syndrome to administer an appropriate treatment.

Key words: HELLP syndrome
Presenter name: A. Astorga

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INCIDENCE OF AND RISK FACTORS FOR BIRTH INJURY

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Introduction

Birth injury is defined as an impairment of the neonate's body function or structure due to an adverse event that occurred at birth. The overall incidence of birth injury has declined with improvements in obstetrical care and prenatal diagnosis, but it remains one of the leading causes of long-term disability. The aim of this study was to determine the incidence of birth trauma and risk factors related to fetal injury.

Materials and Method

We conducted a case-control study. Birth trauma was evaluated in term singleton pregnancies over a 1-year period (2014). Eighty-two neonates, who experienced birth trauma (study case), were compared with 100 newborn of uneventful pregnancies and births (control group). Maternal, infant and delivery characteristics were evaluated as possible risk factors. Statistical analyses were performed using SPSS version 20.0 software. A p value < 0.05 was considered significant.

Results

Birth trauma occurred in 82 of 2551 births (3%). The incidence found was 4,0% for vaginal deliveries and 1,4% for cesarean deliveries. All fetuses were in the vertex presentation. The most common injuries were caput succedaneum and cephalohematoma (51,2%), clavicular fractures (34,1%) and brachial plexus injury (19,5%). The two groups were similar with respect to pregestational/peripartum weight and body mass index (BMI), height, primiparity and multiparity. The mean maternal age (30,7 vs 28,8 years) and the weight gain during pregnancy (16 vs 11 Kg) were higher in the birth trauma group ($p<0,01$). The mean gestational age was 39.1 weeks in the study group and 38.6 weeks in the control group ($p<0.05$). Induction of labor rate was not different between groups ($p=0.53$). The average duration of labor was 9 hours in the study group, compared with 6 hours in the control group ($p<0,01$). In the study group occurred 72 vaginal deliveries, 53 of them were instrumental deliveries, compared with 63 and 16 in the control group, respectively ($p<0,01$). There were not statistical difference between the two groups in vacuum or forceps assisted delivery ($p=0,1$). Mean birth weights (3418 vs 3166 g) and mean birth heights (51 vs 49 cm) were higher in the birth trauma group ($p<0,01$). There were more macrosomic newborns and male infants in the study group ($p<0,05$). Newborns in the study group had lower 1 and 5-minute Apgar Index ($p<0,01$).

Conclusion

Predisposing factors for birth injuries identified in our study included advanced maternal age, excess weight gain during pregnancy, advanced gestational age, prolonged labor, vaginal and instrumental delivery, male infant sex, high birth weight and height. Other studies report that birth injuries are associated with small maternal stature, maternal obesity, primiparous mothers and induction of labor, we don´t find these associations in this study. However, the incidence and predisposing factors for birth injuries identified in our study were similar to those in previous studies.

Key words: birth trauma, fetal injuries, neonatal birth injuries, instrumental delivery, clavicular fracture

Presenter name: Daniela Reis Gonçalves

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BIRTH TRAUMA: EXPERIENCE AT ONE INSTITUTION

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Introduction

Newborn injuries secondary to the mechanical forces applied during labor and delivery are categorized as birth trauma. There is a wide spectrum of birth injuries ranging from minor and self-limited problems to severe injuries that may result in significant neonatal morbidity or mortality. The aim of the present study was to evaluate the incidence of different types of traumatic birth injuries in our institution during a period of time when a significant reduction of our caesarean rate was achieved, and compare it to the current literature.

Materials and Method

We conducted a retrospective study over a 1-year period (2014). We analysed 82 term singleton pregnancies, with fetuses in a cephalic presentation, in which newborns experienced birth trauma. Maternal, infant and delivery characteristics were evaluated.

Results

Birth trauma occurred in 82 term deliveries which corresponded to an incidence of 3%. This result is consistent with other published series. The incidence found was 4% for vaginal deliveries and 1% for cesarean deliveries, the overall incidence reported in the literature is around 2% and 1%, respectively. The most common injuries were caput succedaneum and cephalohematoma (51%), clavicular fractures (34%) and brachial plexus injury (19,5%). Scalp injuries has been reported to occur in 1-2% of all live births, in accordance with the incidence found in our study (1,5%). The majority (52%) of them occurred in the vacuum extraction group. Clavicular fractures are the most commonly reported fractures in neonates, the incidence ranges from 0,5 to 1,6%. In our study, clavicular fracture was the only type of fracture reported, with an incidence of 1%. In the clavicular fracture group, 50% were vacuum-assisted deliveries and 39% were eutocic deliveries. There were 5 cases of shoulder dystocia but only 4 newborns were large for gestational age in this group. The incidence of brachial plexus injury has been reported to occur in 0,04-0,2% of births, while the incidence in this study was higher (0,58%). In the brachial plexus injury group eutocic and vacuum-assisted deliveries were the most common types of birth (38% each) and in most of them (69%) occurred shoulder dystocia. There was 1 case of subdural haemorrhage in a vacuum-assisted delivery and 1 case of subarachnoid haemorrhage in a caesarean delivery after failed vacuum-extractor application, both pregnancies were complicated by gestational diabetes but both newborns had an appropriate weigh for gestational age. There weren´t neonatal deaths to report in the study group.

Conclusion

The frequency of birth trauma has fallen considerably in recent years. This decline reflects an improvement in obstetrical care and prenatal diagnosis and an increased tendency to perform cesarean sections when potential delivery difficulties are identified. However, although the cesarean section rate has decreased from 36,8% to 29,9% in our hospital, in 2014, the incidence of birth trauma in our series is similar to others studies.

Key words: birth trauma, fetal injuries, neonatal birth injuries, instrumental delivery, clavicular fracture

Presenter name: Daniela Reis Gonçalves

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MATERNAL SMOKING, ERYTHROPOIETIN LEVELS IN FETUS AND NEONATAL OUTCOME

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Introduction

Smoking during pregnancy causes severe metabolic, biochemical changes and adaptive response in fetuses leading to increased incidence of maternal and fetal complications. Erythropoietin (EPO) is a glycoprotein hormone and a primary erythropoiesis regulator which stimulates proliferation and differentiation of precursor erythroid cells in bone marrow. Elevated EPO levels were assessed in pregnancies complicated by preeclampsia, diabetes mellitus, fetal macrosomia, meconium stained amniotic fluid, Rh-isoimunisation, intrauterine fetal growth restriction, maternal smoking and alcohol consumption, fetal anemia and hemorrhage. The main aim of our study was to assess the effect of maternal cigarette smoking on umbilical EPO levels.

Materials and Method

The study protocol was approved by Ethical Committee of Jessenius Faculty of Medicine in Martin, Comenius University in Bratislava, Slovakia (No. EK 1034/2012). A total cohort of 174 pregnant females was divided in study group of active smokers (n=67) and control group of non-smokers (n=107). The umbilical plasma has been separated by centrifugation for 15 minutes at 2100 rounds per minute (RPM) and stored at −80°C. For the analysis diagnostic Quantikine® IVD® ELISA, Human Erythropoetin Immunoassay (USA & Canada R & D Systems, Inc.) set was used. All the results were statistically analyzed using IBM® SPSS® Statistics 17 software. We compared the average values in smoking and non-smoking group using the student t-test and correlations were evaluated by regression analysis. The data were enregistered as average value ± standard deviation (SD). Statistically significant differences were defined as $p < 0.05$.

Results

Non-smoking mothers' average age at the time of delivery was 29 ± 5 years in comparison to smokers who were younger (27 ± 6 years at the time of delivery). Smoking mothers consumed daily 7 ± 4 cigarettes during and 17 ± 11 cigarettes daily before the pregnancy, the average years of nicotine abuse was 9 ± 5. Both groups had similar average number of pregnancies, parity and the length of gestation. We observed significantly higher EPO levels in umbilical cord plasma in newborns of smoker mothers in contrast to non-smokers' (61 ± 33 mIU/mL vs. 19 ± 8 mIU/mL, $p < 0.01$). There was no significantly positive statistical correlation between EPO levels and overall years of nicotine abuse.

Conclusion

Smoking during pregnancy is associated with elevated EPO concentrations in umbilical cord plasma at the time of birth. Based on the results of our study, we would like to support women planning pregnancy and pregnant women to quit smoking. Closer surveillance is recommended in smoking pregnant women, particularly because of the risk of placental insufficiency and fetal growth retardation.

Key words: Maternal Smoking, Pregnancy, Erythropoetin

Presenter name: K. Biringer

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Enhanced recovery in elective caesarean section

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Introduction

Enhanced recovery pathways have been used successfully for over 10 years in many surgical specialties such as orthopaedic and colorectal surgeries. It is aimed at improving outcomes, reducing the length of stay and speedier return to normal activity. It is also considered to increase the patient throughput1. Use of enhanced recovery in elective caesarean sections is more recent, but has shown similar benefits2.

We introduced the enhanced recovery in elective caesarean sections in our department and reviewed the results in line with the above outcomes. We also looked into the patient satisfaction with the process.

Materials and Method

Enhanced recovery for elective caesarean section has been introduced at our institution which is a tertiary referral centre with approximately 8,000 deliveries per annum. We prospectively evaluated our practice pre (n=70) and post (n=48) implementation to assess the impact on key peri-operative events, including fasting times, time to mobilisation, duration of catheterisation, time until first void and length of hospital stay. Data on patient experience was collected in the form of a post-operative patient satisfaction questionnaire. In the post implementation group a telephone survey was conducted at day 10-14 to explore their experience and identify any problems post discharge.

Results

We showed improvements in several areas following the introduction of enhanced recovery. Mean pre-operative fluid restriction times were reduced from 6hr to 2.5hr ($p<0.05$), time until mobilisation was reduced from 19.4hr to 7.1hr ($p<0.05$) and catheterisation time was reduced from 17.8hr to 9.5hr ($p<0.05$). Time until discharge was not significantly reduced (39.5hr to 35.75hr, $p=0.3$). Time until voiding following removal of catheter was slightly increased, 3.5hr to 4.7hr ($p<0.05$).

All patients reported their overall experience as good or excellent. Thematic analysis of patient responses in the post implementation group suggested that early mobilisation and catheter removal were particularly welcome, as this made care of their infants easier. Many patients who had had previous elective caesarean sections reported enhanced recovery to be a better experience. Of the 30 patients who agreed to telephone follow up, 93% felt they had been discharged at the right time, 7% felt discharge had been too early. 6 patients required re-attendance to hospital for wound assessment, pain management and assistance with breast feeding. None required re-admission.

Conclusion

In summary, we have found that many of the benefits of enhanced recovery which have been demonstrated in other specialities are applicable to women having elective caesarean section. Women particularly appreciated a better ability to care for their babies because of greater independence afforded by early mobilisation and catheter removal.

Key words: Enhanced recovery, caesarean section

Presenter name: S. Webster

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FACTORS INFLUENCING SPONTANEOUS DELIVERY RATES IN ITALIAN REGION

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Introduction

The majority of women who deliver are healthy and have a physiological pregnancy. The large majority of women give birth after 37 weeks with the fetus in the vertex presentation. Despite this and the drawing up of specific guidelines, the medicalization of birth is still too high with a percentage of caesarean section is no justified.

The aim of this study is to assess adherence to the Physiological Pregnancy guidelines.

Materials and Method

Data were obtained from the Standard Certificate of Live Birth. The eligible subjects were 7964 women which have delivered in Umbria region during 2012. Our outcomes of interest is normal delivery rates in according of demographics characteristics, place of birth and pregnancy characteristics.

Results

The frequency of spontaneous delivery in the Umbria region is 65.9% (5249 women), while the operative delivery (using forceps or vacuum) is 2%. Spontaneous delivery decreases with increasing maternal age as follow: 76.6% in women under 25 years old; 66.1% in women between 25 and 34 years old; 57.2% in women over 35 years old. Spontaneous delivery is more frequent in foreign citizenship's women (69.4% vs 64.2%; OR 1.26; IC 95 %: 1.13<IC<1.42), with heterogeneous values by country of origin (Albania: 79%, Romania: 76.7%, Cameroon: 44.4%, Nigeria 41.9%). There are not significant differences regarding mother's education level and professional status. Spontaneous delivery rate according to place of birth shows a wide variation of frequency. In the Level 1 maternity unit (<1000 deliveries years) we observed a spontaneous delivery rate higher than the regional average (68.4% vs 65.9%). In the Level 2 maternity units (presence of Neonatal Intensive Care Unit), we observed a spontaneous delivery rate lower than the regional average values (63.9% vs 65.9%). The NTSV sample (Nulliparous, Terminal, Single, Vertex) was composed by 3822 women aged between 14 and 49 years excluding non-vertex presentation, multiple pregnancies and medically assisted procreation. The average rate of spontaneous deliveries observed in the NTSV sample, was 67.3%. This value was lower than expected, especially in this class with an indication for the physiological birth. The World Health Organization recommends that the caesarean section rate should not be higher than 10% to 15%. Moreover there is a wide variability between birth centers (58.6% - 92.8%).

Conclusion

Drafting of clinical behavior recommendations and their distribution among health care providers and potential users, must be supported by an implementation program at regional institutional level and at local health authorities and hospitals. Furthermore, to convert guidelines into clinical practice is essential to promote the training of professionals and the interrelationship between midwife and gynecologist to improve the birth quality.

Key words: Normal delivery, Spontaneous delivery, Standard Certificate of Live Birth

Presenter name: Elisa Trequattrini

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Sensation Level of Maternal During Labour and Affecting Factors : An Example Form Turkey

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Introduction

Notable changes are observed in terms of the experiences women all around the world go through during labour. Factors such as the place that delivery takes place, common usage of technology during delivery, increase in the rates of caesarean labour, intervention taking place during delivery etc,. effect emotions and the care given to maternal during the labour. As being a country where traditional and contemporary structures are experienced as complex and also the speed of fertility being 2.2 Turkey is important for the countries with the same structures as an example of depicting the mood of women and the effecting factors during delivery.

Materials and Method

Aim: The aim of this research is to define the sensation of maternals and the effecting factors during delivery.

Design: The research is cross-sectional and analytical. Composed of 24 questions ``Maternal Introduction Form`` and The Labour Agentry Scale prepared by the researchers have been used. The Labour Agentry Scale was developed by Hodnett and Simmons-Tropea (1987) to investigate women's emotions during labour (the feeling of control and satisfaction). The scale was adapted into Turkish by Gencalp (1998), and the Turkish version is a five-point Likert scale composed of 28 items. Evaluation is done with point average of each individuals taken from scale. Maternals with high points are considered to had labour positively. In this scale cronbach alpha level has been determined as 0,791.

Setting: A Education and Research University Hospital in Izmir, Turkey. Participants: 187 women in the early postpartum period, selected with a non-probability method and those volunteer to participate to th research.

Ethics: For the research after having taken the consent of Independent Ethics Institution Number 2 (Izmir), a written consent of the management of the hospital where the data is gathered and consent of maternals participating to the research has been received.

Analysis: Research data has been analyzed by using SPSS statistic program. Number and percentage distribution have been taken, one way analysis of variance, data comparison with t test in independent group and correlation has been carried out.

Results

Age average of maternals is 28.41±5.72 and 73.8% of them are literate or graduated from primary school. 59.4% of maternals have given delivery with caesarean method. The Labour Agentry Scale point average has been determined as 94,78±14.56. No statistically significant difference was found The Lobur Agentry Scale scores with maternals willingness of pregnancy (p=0.75), prenatal eduaction status (p=0.709) neonatal sex (p=0.868) and the way of labour (p=0.314). However the point average of maternals with vaginal delivery has been found higher than those of other ways. In correlation analysis no relation between scale point average and maternals age (p=0,869), number of labour (p=0.686) and labour duration (p=,094) has been found. However it has been found that there is a negative relationship between labour duration and emotion level.

Conclusion

The results of this study showed that, the Labour agentry scale point average was moderate. Although in the early postpartum period the labour agenty point average of maternals is not effected by the labour way and duration statistically it has been found that it is effected in terms of point averages.

Key words: Labour Agentry, labour way, labour number
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Epidural use: influence in labor timings, perineal damage and final women satisfaction

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Introduction
Recent evidence suggests that the progression of labor in modern obstetrics may deviate from that established by Friedman in 1955. One of the main changes in obstetric practice over time included a higher prevalence of epidural analgesia. The aim of this study is to analyze the influence of epidural analgesia in labor progression, perineal damage and final women satisfaction with birth experience.

Materials and Method
This was a cross-sectional study of 220 puerperal women in who it was applied a portuguese adapted Birth Satisfaction Scale-Revised (BSS-R). Women admitted with more than 5cm of dilation were excluded. Data regarding birth was extracted from clinical files. The statistical analysis was done in SPSS, using chi-square test and paired-t student test to compare groups.

Results
In the population studied there were 125 (56,8%) nulliparous women and 95 (43,2%) multiparous women. Epidural analgesia was administered in 172 women (78,2%). The demographic characteristics associated with a lower rate of epidural were higher parity (35,5% versus 70,8%, p<0,001) and unemployment (22,8% versus 39,0%, P=0,035). There were no significant differences regarding age and education level in epidural administration. For nulliparous women, mean length of active phase was significantly longer with epidural (338 versus 101 minutes, p<0,001) as well as mean length of second stage (53 versus 32 minutes, p=0,076). Equally, in multiparous women, both mean length of active phase and of second stage were significantly longer with epidural (233 versus 113 minutes, p<0,001, and 27 versus 15 minutes, p=0,021, respectively). In nulliparous women, the study showed a higher incidence of oxytocin labor augmentation when epidural analgesia was administrated (58,7% versus 7,7%, p<0,001). In terms of perineal damage, in multiparous women, episiotomy was performed significantly more often when epidural was used (22,2% versus 6,1%, p=0,047) without difference in high-grade lacerations incidence. In both groups the mean satisfaction score with labor experience was not significantly affected by epidural administration.

Conclusion
Epidural analgesia provides effective pain relief but at the cost of increased length of labor and obstetric interventions. Despite that, satisfaction with labor experience was not affected. It remains important to tailor analgesic methods used to each woman's wishes, needs and circumstances.

Key words: Epidural analgesia, birth outcomes
Presenter name: Claudia Vinagre

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LABOUR ARREST AND CAESAREAN BIRTH, ARE WE DOING IT RIGHT?

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Introduction

Labour arrest(LA) is one of the main indications for caesarean(CS) birth. Determining whether labour is progressing normally is a key component of intrapartum care, however, realising its onset, measuring its progress and evaluating the factors that affect its course are an inexact science. Due to significant changes in patient characteristics, anaesthesia and obstetrical practices over the past half century, recent data have shown that contemporary labour progresses at a slower rate than what has been historically taught. In 2014 the American College of Obstetricians and Gynaecologists and the Society for Maternal-Fetal Medicine(ACOG/SMFM) published new recommendations for “Safe Prevention of the Primary Caesarean Delivery” in which they have included new criteria for the diagnosis and intervention in LA.

We pretend to analyse how many CS were performed for LA, which criteria have been used to classify the LA and how many CS could have been prevented if the new criteria had been used

Materials and Method

We undertook a retrospective study of all CS births that have occurred in our Hospital between January 1st of 2012 and December 31st of 2014 (n=1470). We selected 256 CS performed due to LA; for each of them the individual patient process has been analysed. We looked at each partogram and searched for the criteria used to diagnose LA. According to the ACOG/SMFM we considered prolonged latent phase (LP) as >20 hours in nulliparous and >14 hours in multiparous women; cervical dilation of 6 cm as the threshold for active phase (AP), prolonged AP as fail to progress despite 4 hours of adequate uterine activity and prolonged second stage (SS) of labour if at least 2 hours of pushing in multiparous and 3 hours in nulliparous (plus 1 hour with use of epidural analgesia).

Results

In the study period we had a CS rate of 27,5% (n=1470); 36,1% (n=530) were elective CS, 34,5% (n=507) were in labour and 29,5% (n=433) were urgent CS; the majority of women were nulliparous (61,3% vs 38,7%). The main indications for CS birth (n=1470) were nonreassuring fetal tracing (27,1% n=398), malpresentation (17,7% n=260), LA (17,4% n=256) and feto-pelvic disproportion (11,8% n=174). The majority of women with CS due to LA were nulliparous (78,5% vs 21,5%) and 87,9% (n=225) had epidural analgesia. CS delivery was decided based on prolonged LP in 51,6% (n=132), prolonged AP in 43,4% (n=111) and prolonged SS in 3,9% (n=10); we have no information on 1,2% (n=3). The mean time elapsed until the decision was 10 hours in LP, 5,1 hours in AP and 1,5 hour in SS. If the ACOG/SMFM criteria were applied, a reduction of 177 CS (69,1%) could be expected: 123 CS (93,2%) in LP, 45 CS (40,1%) in AP and 9 (90%) in SS.

Conclusion

LA is one of the main indications for CS in our Hospital. We still do not use uniform criteria to diagnose and manage LA. With the application of the new criteria proposed by ACOG/SMFM Consensus a significant decrease in CS rate could be achieved. However, we still do not know if these criteria are too restricted or if they should be universally applied to our population. More studies are needed. By providing a critical assessment of care, this study will help us to change our practices.

Key words: Labour arrest ; Caesarean rates ; labour arrest new criteria

Presenter name: Filipa Reis

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POSTPARTUM PHYSICAL FATIGUE AND BLOOD LOSS - A PROCSPECTIVE LONGITUDINAL STUDY

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Introduction

It is unknown for how long postpartum hemorrhage influences maternal physical fatigue in the postpartum period.

The objective was to compare physical fatigue in women who had blood loss less than and greater than 700 ml, and relate hemoglobin and ferritin levels to physical fatigue during the first 12 weeks postpartum.

Materials and Method

We conducted a prospective longitudinal study of healthy women with a singleton pregnancy at Rigshospitalet, University of Copenhagen in 2013 - 2014. Parturients were included within 48 hours after delivery, and completed the physical fatigue subscale of the Multidimensional Fatigue Inventory, at inclusion and at follow-up visits after three days, and one, three, eight, and 12 weeks postpartum.

Results

A total of 182 women completed 12 weeks follow-up; 96 with blood loss greater than and 86 with blood loss less than 700 ml. Physical fatigue scores were significantly higher within the first week postpartum in women with blood loss greater than 700 ml. At three, eight and 12 weeks there was no significant difference. Hemoglobin level correlated with physical fatigue scores until eight weeks postpartum. Ferritin levels did not correlate with physical fatigue score.

Conclusion

Heavy blood loss at delivery is associated with increased physical fatigue in the early postpartum period, but after three weeks there is no longer any influence.

Key words: Blood loss, postpartum, fatigue, Multidimensional Fatigue Inventory

Presenter name: Zeynep Ünver

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THE 10-GROUP ROBSON CLASSIFICATION AND ITS IMPACT ON CAESAREAN RATE

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Introduction

Despite the lack of scientific evidence indicating any substantial maternal and perinatal benefits from caesarean (CS) delivery, CS rates continue to increase worldwide. In order to reduce them, it is important to know why they are being performed. In 2014 a 33% CS rate was registered in Portugal. In January 2015th the Portuguese Health Authority established that every hospital must register and classify every CS performed, this way warranting the surveillance of CS rates in a standardized manner. Our hospital pre-empted this guideline, and started a CS classification protocol in July 2013 using the 10-group Robson Classification - In every CS performed since July 2013 we registered the Robson Classification, the urgency level and the main indication of the procedure.

The objective of this study was to analyse our CS rate and evaluate the impact of the classification protocol on this rate.

Materials and Method

We undertook a retrospective study of 11872 CS births that have occurred in our Hospital between January 1st of 1997 and December 31st of 2014 (18 years). We analysed the CS rates of our hospital, its evolution and the impact of the classification protocol on them. All the information was gathered from a local database. A p value of $< 0,05$ was considered statistically significant.

Results

In the study period we had 45477 births, 26,1% (n=11872) by CS delivery. We achieved the lowest CS rate in 1999 – 21,8% (n=624); rates have then increased in the next years, reaching a maximum in 2009 – 32,4% (n=743), and decreased again to the lowest value in the last 10 years in 2012 - 25,3% (n=491). This rate rose to 30,2% (n=529) in 2013 and decreased again in 2014 to 27,2% (n=450). The operative vaginal deliveries (OVD) accompanied this tendency in an inverse way, with rates of 22,1% (n=429), 20,1% (n=352) and 21,5% (n=356) in 2012, 2013 and 2014 respectively. Evaluating the 17 months of CS classification protocol in our Hospital, from 2013 to 2014, we performed less CS in Labour (LCS) (47,7% vs 33,8%, $p < 0,0001$), more elective CS (ECS)(30,8% vs 36,7%, p=0,053) and more urgent CS (UCS) (21,55% vs 29,56%, p=0,004). In both years, the majority of ECS were performed in Robson's groups number 5 (previous uterine scar) and 6 (pelvic presentation); the majority of UCS and LCS were performed in groups 1 (nulliparous women, cephalic presentation, ≥ 37 weeks, spontaneous labour) and 2 (nulliparous women, cephalic presentation, ≥ 37 weeks, induced labour or CS before labour). The main indication for UCS was nonreassuring fetal tracing (NFT) (76,3% in 2013 and 60,2% in 2014). Concerning LCS, from 2013 to 2014, we lowered our number of CS for NFT (21,8% vs 18,4% p=0,412) and failure of induction (6,4% vs 5,9% p=0,863) and raised the number of CS for labour arrest (LA) (38,1% vs 43,4% p=0,290).

Conclusion

Our CS rate in the last year was lower than the national one. The increase in CS rate along the years was coincident with a decrease in OVD rate; we must then encourage training and ongoing maintenance of practical skills related to OVD. Since the implementation of the CS classification protocol, CS rate has decreased 3%. The impact of the protocol will only be seen in long-term by enabling us to provide critical assessment of care and evaluate the impact of changes in management that may alter these rates.

Key words: Robson Classification, caesarean rate, caesarean classification

Presenter name: Filipa Reis

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OLD MUELLER-HILLIS MANEUVER VS NEW ANGLE OF PROGRESSION: ARE THEY CORRELATED?

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Introduction
Both Mueller-Hillis maneuver (MHM) and angle of progression (AOP) measured by transperineal ultrasound, has been used to assess fetal head descent during the second stage of labor. MHM depends on digital examination being highly subjective. AOP is an objective and reproducible method but may not be available everywhere.

Materials and Method
In this prospective observational study we performed transperineal ultrasound in singleton pregnant women during the second stage of labor. The AOP was measured immediately after the Mueller-Hillis maneuver was executed. A receiver-operating characteristics (ROC) curve analysis was performed to determine the best discriminatory AOP cut-off for the identification of a positive MHM. $p < 0,05$ was considered statistically significant.

Results
75 women were enrolled during the study. The median AOP was 145º (108º to 210º). 68% (n=51) had a positive MHM. The area under the curve for the prediction of a positive maneuver was 0,698 ($p<0,0001$). Derived from de ROC curve, a cut-off 138º had the best diagnostic performance for the identification of a positive MHM (specificity of 62,5% and a sensitivity of 80%).

Conclusion
An angle of progression of 138º seems to be associated with a positive MHM in the second stage of labor.

Key words: Mueller-Hillis maneuver angle of progression
Presenter name: Sofia Mendes

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Alívio não Farmacológico da dor perineal no puerpério imediato

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Introduction

Within the framework of the 4º CMEESMO of ESEL, an internship report was elaborated, entitled "non-pharmacological relief of perineal pain in the immediate puerperium: Midwife's contribute" with the purpose of understanding the causes, consequences and Midwife's actions to counter the perineal discomfort after birth and reduce this problem, promoting a moment of comfort and well-being favorable for bonding, improving the practice as a Midwife.

Materials and Method

Initially there was a research made from a PICo question: "in which way non-pharmacological techniques for pain relief promote the comfort of the mother in the immediate puerperium". With the words "Perine* and Pain and Relief" introduced on the several databases with the use of restrictors, and after the exclusion of articles that are repeated or didn't approach the subject, 13 articles were obtained from which a literary revision was made. After the analysis, data collection and knowledge application, followed by a new analysis and assessment with the cared mothers through interviews, a reflection of the non-pharmacological methods of pain relief was made, and this way, tried to identify the contribute of the Midwife in this problematic, identifying the mothers discomforts and guiding them through measures to minimize them.

Results

There were 22 mothers interviewed, with ages between 18 and 40 years old, to figure out what are the factors and in which way they were going to influence the pain felt in the immediate puerperium.

Conclusion

It was understood that the morbidity and the negative consequences are reduced if the mothers are given the necessary information for their self-care. The application of non-pharmacological techniques for pain relief reduced the perineal pain felt by the mothers, being the application of cold water the most effective one.

Key words: relief, pain, perineum, non-pharmacological techniques, puerperium

Presenter name: Nádia Santos

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Maternal and neonatal morbidity following an attempted operative vaginal delivery according to the fetal head station: prospective study.

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Introduction

Objective: To assess respectively severe maternal and neonatal morbidity following an attempted operative vaginal delivery (aOVD) according to the fetal head station at instrument's application, and to compare specifically the severe maternal and neonatal morbidity between mid- and lowpelvic aOVD.

Materials and Method

Design: Prospective study.

Setting and participants: 2138 women with a live singleton pregnancy, at term, and a cephalic vertex presentation whether the aOVD was successful or not, in a tertiary care university hospital at Angers, France, from December 2008 through October 2013.

Main outcome measures: Comparisons of maternal and neonatal outcomes following aOVD according to the fetal head station, and specifically the association between the use of midpelvic aOVD with an increasing in maternal and neonatal morbidity compared to lowpelvic aOVD, using multivariate logistic regression and propensity score methodology for ensuring comparability of the considered groups.

Results

Midpelvic aOVD occurred in 18.3% (n=391), low in 72.5% (n=1550), and outlet in 9.2% (n=197). According to the fetal head station, severe maternal morbidity occurred in 10.2% (n=40), 7.8% (n=121), and 6.6% (n=13), respectively. Severe neonatal morbidity occurred in 15.1% (n=59), 10.2% (n=158), and 10.7% (n=21), respectively.

When using multivariable logistic regression analysis, composite maternal and neonatal morbidity did not differ between mid- and low-pelvic aOVD. When matching data on the propensity score, midpelvic OVD was not significantly associated with severe maternal (adjusted odds ratio 0.69, 95% confidence interval 0.39 to 1.22) and neonatal morbidity (adjusted odds ratio 0.88, 95% confidence interval 0.53 to 1.45) compared to low-pelvic aOVD.

Conclusion

In single term pregnancies, the use of midpelvic aOVD was not associated with an increasing in severe short-term maternal and neonatal morbidity.

Key words: Operative vaginal delivery; Maternal morbidity, Neonatal morbidity, Midforceps

Presenter name: G. Ducarme

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NITROUS OXIDE MIX ON ANALGESIA OF LABOR THE EXPERIENCE OF PREGNANT WOMEN WITH INHALATION ANALGESIA AT THE DELIVERY ROOM OF THE HOSPITAL GARCIA DE ORTA

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Introduction

The inhalation anesthesia with a mixture of nitrous oxide is widely used in many countries in the control of pain during labor.

As a non-invasive method of analgesia, it gives women more control and empowerment over their labor. It does not interfere in the physiology of labor and does not alter the perception of the contraction, it makes it more manageable, allowing women giving birth, as much as possible, with the feeling of a natural birth. As it isn't used, in Portugal, as a common method of labour anagesia and we had no experience in use it,the study analyzed the experience of the use of inhalation analgesia in relief of labor pain and desire of women to repeat the method in future delivery.

Materials and Method

It was a descriptive and quantitative study with 45 mothers with deliveries at term and absence of risk factors, who wanted to use the method during November and December 2013. It was used a form to acess the demografic , labour and pain variables, as wel as the living experience of women.

Results

From the entire sample, two groups emerged spontaneously: mothers who used exclusively inhalation analgesia during labor (56.8%) and a group whose mothers needed to change from the inhalation analgesia to regional analgesia. The inhalation analgesia was seen by 79% of all users as efficient and very effective. The average value assigned to the pain, measured with the numeric pain scale, before the start of inhalation analgesia was 9 and lowered to 4.6 after 30 min using the method. Overall 81.4% of the sample would like to repeat this method in a future birth.The side effects reported, in about half the sample, were mild. The most frequent were dizziness and sleepiness at the beginning of inhalation.

There were no significant changes in the heart rate, blood pressure and oxygen saturation in users who have used this method. As well as adverse effects were not detected in newborns, which were born with a mean Apgar score at 1 minute 8,9.

In the sample 71% of users had eutocic delivery, 18.5% dystocic vaginal delivery and 10.5% cesarean section. Compared with the overall service data, for the period in which the study was conducted, it was found in the sample a higher rate of eutocic and dystocic vaginal delivery and a lower cesarean rate.

Conclusion

The women were very confortable with the experience, there were no significant side effects, the method was well accepted, easy to use by womens who wanted to repeat it in future labours.

It seemed that the use of inhaled analgesia can be greatly improved and more efficient when used in a spontaneous labor and active phase of labor.

Key words: nitrous oxide ,analgesia,pain, delivery,labor

Presenter name: A. Guerra;

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ADAPTACION OF SCIENTIFIC EVIDENCE TO WORK IN THE DELIVERY ROOM OF “LA RIBERA” HOSPITAL (VALENCIA, SPAIN).

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Introduction

Introduction: The current scientific evidence (“Iniciativa Parto Normal” (2005), “Estrategia de atención al parto normal en la Comunidad Valenciana” (2009)…) has generated a series of changes in the way of serving pregnant in her birthing process.

Therefore, midwifes want to know the degree of knowledge of new protocols that we have introduced in our work environment and if these protocols are part of their expectation of delivery, in order to improve the quality of our care.

Materials and Method

Material and methods: It has been realized a descriptive study by completing a survey that collects pregnant women between 37 and 41 weeks of pregnancy in antepartum hospital controls. Preterm deliveries, minors and women who do not know the language are excluded.

Socio-demographics data, knowledge of new protocols and expectations of delivery of pregnant women are collected, for a total sample of 213 surveys, whose results are tabulated in a Excel sheet and afterwards were treated with the SPSS statistical software.

Results

Summary results: In the current state of research we have defined the demographic characteristics of the sample, the level of prior knowledge of our pregnant about new protocols and the interest of pregnant women in these protocols are part of the birthing process. Moreover, we picked up data about the assistance to formative activities (maternal education, for example) and his relationship with above mentioned knowledge and expectations.

Conclusion

Conclusions: Results emphasize that the expectations of pregnant women do not usually coincide with the recommendations of various organizations, based on current scientific evidence. Not yet have enough information about the reason of this behavior.

For future research we propose different explanatory factors as hypotheses, such as educational and cultural level of pregnant women or degree of information obtained through health professionals. Therefore, we believe that it would be interesting to carry going on depth in this question in the future to provide the best quality care.

Key words: knowledge, expectations, pregnancy, delivery, excellence welfare quality.

Presenter name: Camacho-Morell, Francisca

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Fetal ECG of a fetus with tetralogy of Fallot

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Introduction

Congenital heart disease (CHD) is a severe condition, which needs early detection and treatment. The current method for detecting CHD during pregnancy is a structural ultrasound around week 20 of gestation. Only 65 to 81 per cent of CHD cases are detected by this method. This detection rate is moreover highly dependent of the experience of the performer. Therefore, there is need for a technique with a higher sensitivity, in order to guarantee early detection of CHD. This new technique could be the transabdominal non-invasive fetal electrocardiogram (fECG). In de following, we will discuss a case of a fetus with known tetralogy of Fallot and a missing pulmonary valve who underwent a fECG.

Materials and Method

The fECG measurement was performed using 8 adhesive electrodes spread across the abdomen. The fECG signal was extracted from the abdominal recordings using dedicated signal processing methods. Subsequently, information from the various electrodes was combined in three steps to produce an interpretable ECG. In the first step, the various fECG signal were combined to yield a fetal vectorcardiogram (fVCG). In the second step, this fVCG was rotated to align with the fetal orientation, which was determined using ultrasound examination. In the third step, we used the Dower matrix to convert the rotated fVCG into an estimate of the 12-lead fECG.

Results

A 27 year old woman came to our tertiary care center after the structural ultrasound. She was 20 weeks pregnant. The patient is a healthy woman with, just like her partner, no family history of CHD. It was an uncomplicated pregnancy.

The structural ultrasound revealed a tetralogy of Fallot with a missing pulmonary valve, a dilated stem of the pulmonary artery on the left side of 7.5 mm. The right pulmonary artery had a normal diameter of 3.7 mm. In the left side of the heart, an echogenic spot was seen.

No other abnormalities were found. Non-invasive prenatal blood testing was normal for trisomie 21, 13 and 18.

Results

The fECG was analyzed and compared with normal values of fECG of similar gestional age. The QRS-complex duration was 58ms. The electrical heart axis was -132°. The onset and termination of the p- and T-waves over the different electrodes could not be clearly defined. Therefore, no other intervals were calculated.

Conclusion

Stinstra et al found a QRS duration between 20ms and 50ms at 20 weeks of gestation. The extended duration of the QRS complex of 58ms is suggestive for ventricular hypertrophy. Furthermore, the electrical heart axis of this fetus shows a right axis deviation.

The extended duration of the QRS-complex and the right axis deviation may indicate right ventricle hypertrophy which is seen in tetralogy of Fallot. Although our results are promising, more research is needed for further development of the technique and establishing normal ranges of the fECG.

Key words: fetal electrocardiography, fECG, congenital heart disease, CHD

Presenter name: Carlijn Lempersz

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AMNIOTIC FLUID EMBOLISM AND FAVORABLE OUTCOME HAVING GOOD TEAMWORK CASE REPORT

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Introduction

Syndrome of amniotic fluid embolism is a rare and life threatening condition that occurs in pregnancy or shortly after delivery. Incidence rate is between 1 and 12 cases per 100,000 deliveries. It is unpredictable and unpreventable event, clinical diagnosis is set by exclusion of the other conditions. Maternal mortality because of this complication remains high, although is lower in last years for 20-40%. Risk factors include: fast and assisted delivery, cesarean section, cervical lacerations, placenta praevia, abruptio placentae, preeclampsia, advanced maternal age and induction of labor.

Materials and Method

In this article we present a case of a healthy secundiparous woman, who became pregnant after in vitro fertilisation and we induced labor with vaginal Prostaglandin E2 at 41+1 weeks gestation.10 minutes after amniotomy she became unconscious with previously present feeling of nausea and dispnea. After immediate resuscitative efforts emergency caesarean section was made and at the end of the operation the signs of the disseminated intravascular coagulation appeared.

Results

Cardiac ultrasound showed hyperechogenic masses in the right ventricle.We suspected in Amniotic fluid embolism. Prompt and aggressive management of coagulation disorders led to normalisation of coagulation after 24 hours. We successfully stopped uterine bleeding with application of Bakri balloon.

The newborn was transferred to Clinical department of pediatric surgery and intensive care in University clinical center in Ljubljana.

Conclusion

This article presents the actions at suspected Syndrome of amniotic fluid embolism, good teamwork and a successful outcome for mother and newborn.

Key words: amniotic fluid embolisms, risk factors, induction of labor, amniotomy, diagnosis, management, Bakri balloon

Presenter name: Silvestra Kasnik-Cas

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SYSTEMATIC REVIEW OF THE EFFECTIVENESS OF MEMBRANE SWEEPING FOR INDUCTION OF LABOUR

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6: SPECIALIST IN GINECOLOGY AND OBSTRETIC

Introduction

While the medical literature shows that not all post-term pregnancies involve gestations with complications, but finds an increase risk of perinatal morbidity and mortality and maternal mobility. There is not a common consent on what is the best method for fetal monitoring during prolonged gestation nor about the deadline to end pregnancy.

Stripping the membranes is a procedure to take when pregnant women comes to term, to decrease the incidence of prolonged pregnancies.

From The Cochrane Library on the subject, there have been new studies evaluating the efficacy of this maneuver. For this reason it has been interesting to conduct a systematic review of these recent research that it will result in a poster format

Materials and Method

Literature review through a systematic search of the following databases: tripdata base, evidence based nursing, Cochrane, Pubmed, cinhal, cuiden, cuidatge, enfispo. Have also been consulted documents published in organizations and societies such as: WHO (World Health Organization), FIGO (International Federation of Gynecology and Obstetrics, SEGO (Spanish Society of Gynecology and Obstetrics), ACOG (The American Congress of Obstetricians and Gynecologist).

We have selected articles published between 2009 and 2014.

Results

Fifteen items were found on effectiveness of membrane sweeping for induction of labour.

The found results indicate that reduces the time to onset of spontaneous labour and therefore, the need for induction of labour.

The evidence indicates that not modify neonatal outcomes or cesarean rates and/or instrumental deliveries, all without increasing the risk of maternal or neonatal infection.

For women who are considered to need an induction of labour, sweeping of the membranes would expect a reduction in the use of formal methods for labour induction such as the use of oxytocin, prostaglandins or amniotomy.

The negative outcomes found were that can produce some discomfort to the mother and other side effects like bleeding attributable to the procedure

Conclusion

Have an updated information on the effectiveness of membrane sweeping for induction of labour contributes to increase knowledge of midwives and obstetricians in order to provide women a membrane sweeping prior to an induction of labour.

Key words: membrane sweeping/stripping, effectiveness, pregnancy, post-term, cervical ripening and induction of labour.

Presenter name: CRISTINA CANAL

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INDUCTION OF LABOUR: 41 OR 42 WEEKS? AN OVERVIEW OF THE EVIDENCE

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Introduction

Post-term pregnancy is associated with increased perinatal and maternal risk. Although WHO's definition of post-term pregnancy concerns a pregnancy of 42+0 weeks and beyond, the upper limit seems to shift towards a gestational age of 41 weeks.

Several meta analyses and systematic reviews were published on IOL for improvement of birth outcome beyond term. In these publications IOL at or beyond 41 weeks was associated with a decreased risk on perinatal mortality and morbidity and with a lower rate of caesarean sections. As a result, policy regarding the management of post-term pregnancy has changed in many countries in favor of IOL at 41 weeks instead of 42 weeks. However the evidence for such a shift in policy is questionable in view of the heterogeneity of the included studies.

Therefore, we re-evaluated the studies of the reviews in order to establish the quality of the evidence on the benefits and harms of a policy of IOL at 41 weeks compared to expectant management until 42 weeks.

Materials and Method

The studies from the systematic reviews of Gülmezoglu, Hussain and Wennerholm were evaluated on their quality according to the GRADE instrument. Gestational age at start of the intervention and the upper limit of gestational age in the control groups were defined. Rates of perinatal mortality, meconium aspiration syndrome (MAS) and cesarean section were calculated from all studies for the timeframe of 41 to 42 weeks of gestational age.

Results

Most studies in the systematic reviews did not focus on the 41 to 42 weeks' timeframe. In 12 out of 22 studies(2) the study protocol indicated IOL beyond 41 weeks and 16 out of 22 studies had an EM policy allowing spontaneous onset of labor far beyond 42 weeks of gestation. 59% (13/22) of the studies was of low quality according to the GRADE instrument.

We found three studies(5,6,7) that fitted in the time frame of 41-42 weeks, two perinatal deaths occurred in the EM groups of these studies (IOL 0/489 EM 2/492, OR :0.20; 95%CI 0.01–4.18). One large study(8) had a policy of EM until 44 weeks, though 2 fetal deaths occurred between 41 and 42 weeks. If these two deaths were included in the 41-42 weeks' time frame than four of the fourteen perinatal deaths described in the systematic reviews could be attributed to a policy of EM (IOL 0/2190 EM 4/2198, OR: 0.11; 95%CI 0.01-2.07).

Two of the studies(5,6) in the reviews were included for reporting the incidence of MAS in the 41-42 period. However one study did not describe MAS, but meconium stained amniotic fluid. This left one study for the incidence of MAS with a non-significant reduction of MAS after IOL (IOL 4/300 EM 12/300, OR: 0.32; 95%CI 0.09-1.10).

Cesarean sections was reported in two studies(5,6) that fit in the time frame of 41-42 weeks. IOL showed a non-significant reduction in CS (IOL 65/375 EM 73/375, OR: 0.87; 95%CI 0.59-1.28).

Conclusion

More than half of the included studies in the systematic reviews on IOL at or beyond 41 weeks are of low quality(3). A policy of IOL at 41 weeks compared to a policy of expectant management until 42 weeks did not show significant differences in perinatal mortality, MAS and cesarean sections.

These findings show that it is difficult—if not impossible—to draw conclusions on the optimal management of late-term pregnancies from the existing literature.

Key words: induction of labor, expectant management, late-term, post-term, pregnancy, perinatal mortality, perinatal morbidity, meconium aspiration syndrome, cesarean section

Presenter name: JKJ Keulen

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TRANSCERVICAL INTRAPARTUM AMNIOINFUSION IN WOMEN WITH PREVIOUS CESAREAN DELIVERY

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Introduction

Amnioinfusion (AI) is a technique used when recurrent variable decelerations in fetal heart rate (FHR) tracing or meconium-stained amniotic fluid appear during labour. One of its relative contraindications is the presence of anomalies or scars in the uterus, including cesarean section. The aim of the study was to analyze the use of AI in women with a previous caesarean(PC) and its impact on FHR tracings and obstetric outcomes.

Materials and Method

We carried out a retrospective study to compare the use of amnioinfusion between pregnant women with previous cesarean(study group) and the ones without PC (control group). All cases were identified from a database that contained cesarean deliveries perfomed at Virgen de la Nieves University Hospital in Granada (Spain) between 2010-2014.

All data were analysed using Student's t-test to compare continuous variables, and Chi-squared test for qualitative or discrete variables, establishing a level of significance p <0,05.

Results

We identified 45 cases of AI in pregnant women with PC and 100 cases of AI without PC.

In relation to the onset of labor, we observed 61% of inductions labours in the control group and 50% in the study one. The most frequent reasons for induction in both groups were: premature rupture of membranes (13.3%PC group and 22% noPC) and pregnancy in the process of extension (8.9% vs 8%)(pNS).

The most AI type used in both groups was the "therapeutic AI": 39(86.7%) in the PC group vs 93(93%) in the group without PC(pNS). Variable decelerations disappeared in response to AI in 24(53.3%) of pregnant women with PC and in 61cases(61%) of the control group. (pNS).

In relation to the appearance of meconium-stained amniotic fluid, no differences between the two study groups were observed: 18(40%) in PC vs 39(39%) in the control group.

About changes in the uterine wall,4 cases were observed (8.9%) in the group of PC: 3 of hysterorraphy dehiscence (6.6%) and 1 case of uterine rupture(2,2%). In the control group was described a case(1%) related with the development of a hematoma,p=0.02

No significant differences in neonatal outcomes (low values arterial and venous pH, low Apgar score at 1 and 5 minutes) between the two groups were observed.

Conclusion

About patient safety, there is a significant increase in the uterine wall lesions in the group of pregnant women with PC. However, the incidence of uterine scar dehiscence was similar to the group without AI.

These results are consistent with previous reports that evaluate the risk of uterine rupture in the light of an increased intrauterine pressure, as occurs in the presence of polyhydramnios or macrosomas fetuses. In these cases, as well as using AI, there is no increase in the rate of uterine rupture.

Therefore, the use of AI in pregnant women with PC is an option, provided it is done with proper control of intrauterine pressure and FHR.

Key words: AMNIOINFUSION, CESAREAN SECTION

Presenter name: L. Revelles

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Twin delivery: the role of chorionicity

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Introduction

Multiple pregnancies account for about 3% of all pregnancies. Monochorionic (MC) twins are at increased risk for intrapartum complications, perinatal mortality and morbidity compared with dichorionic (DC) twins. The purpose of this study was to evaluate the impact of chorionicity on the mode of delivery, neonatal morbidity and Neonatal Intensive Care Unit (NICU) admission in twin pregnancies.

Materials and Method

We conducted a retrospective, longitudinal, descriptive and analytical study of 703 twin pregnancies in the Obstetric Unit of a level III Hospital, for a period of fourteen years (from 1st of January 2000 until 31st of December 2014). We considered two groups according to the chorionicity: MC and DC. Inclusion criteria: MC and DC twin pregnancies confirmed by ultrasound. Exclusion criteria: monochorionic monoamniotic gestation, foetal anomalies, early or late foetal demise, twin-to-twin transfusion syndrome. Demographic data, delivery variables and maternal and neonatal morbidity and NICU stay were studied. Data were analised using the software IBM® SPSS® Statistics 21.0. A p value <0.05 was considered as significant.

Results

From the 703 twin pregnancies included, 177 (25,2%) were MC and 526 (74,8%) pregnancies were DC. Mean maternal age was 30,9 in MC and 31,8 years in DC ($p<0,05$); parity ≥1 was higher in MC (53,1% vs 40,5%; $p<0,01$). The preterm delivery was higher in the MC (83,1% vs 68,3%; $p<0,01$). Vaginal delivery was the most frequent route of delivery (52,0% vs 50,8%; pNs). The rate of induction of labour (32-24,6% MC; 80-21,4% DC; pNs) and elective caesarean section (32-24,6% MC; 97-25,9% DC; pNs) was similar in both groups. Caesarean section after trial of labour was not different (8-25% vs 24-30%; pNS). In the group of MC pregnancies, newborns had a lower average birth weight: first (2099,2g vs 2262,4g; $p<0,001$) and second twin (1988,6g vs 2232,0g; $p<0,001$). The morbidity and NICU admission was more frequent in the MC twins (20,1% vs 11,8%; $p<0,001$ and 41,5% vs 28,6%; $p<0,001$) and similar between first and second twin in each groups. The Apgar score < 7 at fifth minute was only different between first and second twin in vaginal delivery in DC (5,6% vs 21,5%; $p<0,001$). A logistic regression, identified the parity alone as a risk factor for mode of delivery ($OR=0,562$; $p<0,05$). Multiparous women had half the risk of cesarean section. Neither the chorionicity nor the trial of labor, were risk factors for the mode of delivery. The gestational age was the main risk factor for morbidity and NICU admission ($OD=0,735$; $p<0,001$ and $OD=0,545$; $p<0,001$).

Conclusion

MC and DC twin pregnancies had similar labour and delivery outcomes in our study. The chorionicity was not a risk factor for the mode of delivery, morbidity or NICU admission. Both spontaneous and planned vaginal birth were safe in MC twins. Vaginal birth could be an option to women with twin pregnancies regardless chorionicity.

Key words: twin pregnancies, chorionicity, delivery

Presenter name: Diana Vale

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EVALUATION OF THE POTENTIAL TO AVOIDABLE CESAREAN SECTIONS, BASED ON ROBSON'S 10-GROUP CLASSIFICATION

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Introduction

The challenge to monitoring indicators of a hospital production, based on the provision of care, remains a complex task. The informatization of clinical process and the clinical data retrieval can contribute to the management of maternities, resulting in the improvement of care. Analytic systems to calculate indicators of performance and present dashboards are real possibilities for the medical informatics. An important reference to guide actions that result in the reduction of unnecessary cesarean sections (CS) has been the analysis of cesarean rate by the stratification in 10 groups, proposed by Robson (1). This methodology uses relevant obstetric criteria, easy to record since information systems are prepared to collect the necessary dataset. But, in each one of 10 mutually exclusive groups, different actions can be proposed to rationally reduce the CS index. This study aims to propose an automated score indicating the potential avoidable CS, based on 10 groups proposed by Robson.

Materials and Method

In order to quantify the degree of preventability of CS, a graduated scale was proposed: very preventable cesareans (weight 3), preventable cesareans (weight 2) and little preventable cesareans (weight 1). A survey evaluated the opinion of experts in obstetrics about the degree of preventability of cesarean sections in each of the 10 groups, based on own knowledge and experience. The participants were contacted by email and received an electronic questionnaire explaining the reasons for the research and a voluntary participation agreement (Ethics Committee: CAAE-Brazil 10286913.3.0000.5149). The health professional still received guidance on the methodology of Robson Classification for CS, and was requested to apply the preventability of scale in each one of the 10 groups. The preventability score was calculated by weighing up the response frequencies obtained in each group. Score ranged from 1 that indicates less avoidable occurrence of CS, to the value 3 the most avoidable.

Results

Among the invited professionals, 37 agreed to participate: 18 (49%) were medical gynecologists / obstetricians, 10 (27%) were midwives and 8 (22%) were paediatricians / neonatologists. The group of health professionals was composed of 30 women (81%). 16 professionals (43%) were familiar with the rating proposed by Robson. Most (86%) of respondents answered that the CS would be "very preventable" in group 1 (score: 2.9). 61% answered that the CS would be "avoidable" in group 2 (score: 2.3). 97% answered that the CS would be "very preventable" in group 3 (score: 3.0). 61% answered that the CS would be "very preventable" in group 4 (score: 2.6). 83% answered that the CS would be "avoidable" in group 5 (score: 2.1). 83% answered that the CS would be "little avoidable" in group 6 (score: 1.2). 49% answered that the CS would be "preventable" and 49% would be somewhat preventable in group 7 (score: 1.5). 58% answered that the CS would be "avoidable" in group 8 (score: 1.7). 94% answered that the CS would be "little avoidable" in group 9 (score: 1.1). 78% answered that the CS would be "avoidable" in group 10 (score: 2).

Conclusion

We believe that a scale of avoidable CS can be suggested based on the expert opinion. But the validation, implementation and use of information systems in strategic planning institutions that aims to reduction targets CS rates have yet to be determined.

Key words: Caesarean section, Robson classification, Classification system, Health Care, Information Systems
Presenter name: Juliano Gaspar

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Mode of delivery in drug-dependent pregnant women

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Introduction

Drug abuse during pregnancy poses significant health risks for both the mother and the fetus. Its impact on the mode of delivery has never been studied. Our aim was to evaluate the influence of drug dependence on the mode of delivery and the factors influencing vaginal and cesarean delivery in drug-addicted pregnant women.

Materials and Method

Retrospective cohort study of 255 drug dependent (DD) pregnant women whose antenatal care and delivery was at our institution, during a 14-year period. Controls were non-drug dependent (non-DD) low risk women with a delivery date during the same period (n=228). Maternal characteristics (age, body mass index, ethnicity, smoking and alcohol history), obstetric history, pregnancy complications (gestational diabetes, hypertensive complications, placental abnormalities, fetal growth restriction and macrossomia) and labor details (fetal presentation, induction of labor and mode of delivery) were compared between the two groups. Factors that influenced the mode of delivery were determined and the effect of drug abuse was analysed in the DD group.

Results

Of the 255 DD enrolled patients, 19 cases of seropositivity for HIV were excluded (n=236). Compared to non-DD, the DD group presented a lower rate of cesarean delivery (18,2 vs. 29,4%, p=0,005). Drug dependent women were younger (28,86 vs. 30,10 years, p=0,003), presented a lower body mass index (25,36 vs. 28,16 Kg/m2, p<0,001), a lower rate of primiparity (46,2 vs. 65,4%, p<0,001), a higher rate of previous vaginal delivery (44,9 vs. 25,4%, p<0,001), a higher rate of fetal growth restriction (20,3 vs. 12,3%, p=0,019) and a higher rate of prematurity (16,6% vs 10,1%, p=0,04). After adjusting for the factors that were significantly related to the mode of delivery (primiparity, p=0,017; previous cesarean or vaginal delivery, p<0,001; placental abnormalities, p=0,003; and fetal presentation, p<0,001), drug dependency was significantly related to the mode of delivery (adjusted OR 0,523, 95% CI 0,307-0,893). Within the DD group, the mode of delivery was significantly related to the mother's educational level (p=0,006), previous cesarean (p=0,004) or vaginal (p<0,001) delivery and fetal presentation (p<0,001), but not with late start of antenatal care, smoking or alcohol history, seropositivity for infectious diseases, type of drug abused, route of administration or opioid replacement therapy.

Conclusion

The DD group presented a significantly higher rate of vaginal delivery. However, this was not associated with the behavioral factors analysed. We hypothesize that other social and psychological factors might explain this difference.

Key words: Drug-dependency, pregnancy, mode of delivery
Presenter name: A.R. Neves

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ANTI-MUSK-POSITIVE MYASTHENIA GRAVIS DIAGNOSED DURING PREGNANCY: NEW CHALLENGES FOR AN OLD DISEASE?

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Introduction

Myasthenia gravis (MG) is an autoimmune disorder affecting predominantly women in their reproductive age. The course of the disease during pregnancy is unpredictable, although it is more difficult to manage earlier in the gestation and is usually associated with a remission of symptoms on the second and third trimesters. MG with antibodies against the muscle-specific receptor tyrosine kinase (anti-MuSK MG) has been described as a subtype of disease with more localized clinical features and a poorer response to treatment than acetylcholine receptor-antibody (anti-AChR) positive patients. Few cases of this subtype of disease have been reported in pregnant women, with deliveries being performed mainly by cesarean section.

Materials and Method

Analysis of the clinical records of a patient with anti-MuSK-positive MG diagnosed during pregnancy and description of intrapartum care and mode of delivery.

Results

A 39-year-old patient, gravida 3, para 1 was diagnosed with anti-MuSK MG during the first trimester of pregnancy. She presented two episodes of myasthenic exacerbation during the second trimester motivating hospitalization. Despite the interdisciplinary surveillance and therapeutic approach with pyridostigmine, intravenous immunoglobulin (IvIG) and steroids the patient remained residually symptomatic during pregnancy. At 34+4 weeks of gestation she presented to the emergency room with preterm premature rupture of membranes showing mild myasthenic symptoms. Assessment of fetal well-being was reassuring. Ambulatory medication was maintained until delivery. With the beginning of the active phase of labor, intravenous hydrocortisone protocol for prophylaxis of adrenal insufficiency was initiated. Eutocic delivery was performed uneventfully 12h30 after rupture of membranes. The newborn showed no signs of muscular weakness. Three months after, the patient presents only with mild facial diparesis under a reducing schedule of steroids and monthly IvIG.

Conclusion

Myasthenia gravis especially when associated with pregnancy is a high-risk disease. The physiopathological mechanisms by which anti-MuSK antibodies cause myasthenic symptoms are not completely understood. Their clarification may change our understanding of labor in these patients. In the few cases reported, delivery was performed mainly by cesarean section. However, given the patient's clinical stability on ambulatory medication, we decided on a vaginal trial of labor. We report our successful experience highlighting the importance of a multidisciplinary approach of myasthenic patients.

Key words: anti-MuSK, myasthenia gravis, pregnancy

Presenter name: A.R. Neves

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WOMEN'S BIRTHPLACE DECISION-MAKING, THE ROLE OF CONFIDENCE: PART OF THE EVALUATING MATERNITY UNITS STUDY, NEW ZEALAND.

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Introduction

Birthplace is a profoundly important aspect of women's experience of childbirth. Birthplace decision-making is complex, in common with many other aspects of childbirth. I describe the influences on women's birthplace decision-making in New Zealand and identify the factors which enable women to plan to give birth in a freestanding midwifery-led primary level maternity unit (PMU) rather than in an obstetric-led tertiary level maternity hospital (TMH).

Materials and Method

The Evaluating Maternity Units (EMU) prospective cohort study used a mixed method methodology. Data from eight focus groups (37 women) and a six week postpartum survey (571 women, 82%) were analysed using thematic analysis and descriptive statistics. Participants were well, pregnant women booked to give birth in a PMU or TMH in Christchurch, New Zealand (2010-2012). The participants received continuity of midwifery care regardless their intended or actual birthplace.

Results

Almost all the participants perceived themselves as the primary birthplace decision-makers. Accessing a 'specialist facility' was the most important factor for the TMH group. The PMU group identified several factors, including 'closeness to home', 'ease of access', the 'atmosphere' or 'feel' of the unit and avoidance of 'unnecessary intervention' as important. Both groups believed their chosen birthplace was the right and 'safe' place for them. The concept of 'safety' was integral and based on the participants' differing perception of safety in childbirth.

Five core themes were identified: the birth process, women's self-belief in their ability to give birth, women's midwives, the health system and birth place. "Confidence" was identified as the overarching concept influencing the themes and found to be a key enabler for women to plan to give birth in a freestanding midwife-led primary level maternity unit in New Zealand.

Conclusion

The groups' responses expressed different ideologies about childbirth. The TMH group appear to identify with the 'technocratic model' of birth, and the PMU group identified with the 'holistic model'. Research evidence affirming the 'clinical safety' of primary units addresses only one aspect of the beliefs influencing women's birthplace decision-making. The findings from this study suggest that women who have confidence in the birth process, their ability to give birth, their midwife, the health system and the intended birthplace are able to plan a PMU birth. Addressing the underlying beliefs which influence these confidences in women may facilitate well women in western resource-rich countries to comfortably plan to give birth away from high-tech hospitals.

Key words: decision-making, place of birth, birthplace, primary maternity unit, tertiary hospital, New Zealand, safety, confidence

Presenter name: Celia Grigg

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Home Birth: 100% Natural childbirth vs Hospital Birth - What is the women choice?

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Introduction

The controversy and debate about home birth has increased over the last years. At the literature there is no agreement about maternal and neonatal outcomes. Several studies support that home deliveries lead to less medical intervention and are as safe as births occurred at the hospital. The majority of the researches defend that high risk pregnancies should give birth at the hospital with access to medical monitoring and care. However, in low risk pregnancies there aren't strong evidences to support the choice of the birth setting, so most of the medical associations leave the decision to the women.

Materials and Method

The aim of this study is to perform a systematic literature review and a descriptive statistical analysis about the evolution of home delivery in Portugal compared with other countries. It was performed a review based on data and studies retrieved from searches in INE, Pordata, Europeristat, CDC and PubMed.

Results

In Europe and USA home birth remains a minority and according to the European Perinatal Healthy Report 2010 most of the countries reported less than 1%. However, in the last few years we have noticed an increase in the number of home deliveries. In USA the number of home births have increased since 2004 and reached 1,36%, in 2012. The UK national statistics reported a decline of the home delivers after 1960 but recently there has been an increase in the number of home births (2.4% at 2011). But what's happening in Portugal? Is our country following the new tendency? In Portugal, until the 60s, home birth was a tradition and nearly 80% of the delivers occurred out of the hospital. With the development of an organized national health system the paradigm changed and nowadays the majority of the delivers occurs at the hospital. Despite the lack of organized data, in this study we verified that in Portugal, as in many european countries, there is an slight increase in the number of home deliveries since 2003. Recent data demonstrate that in 2013 0.7% of the deliveries occurred at home.

Conclusion

In this research we conclude that in Portugal and other countries there is an increasing number of women that are choosing to give birth at home. However, in our country, home deliveries occurred in a small proportion comparing with other countries. This study showed that practices and other behaviors around childbirth are changing in society and in the last few years more women are choosing to give birth in a more natural and homely environment.

Key words: homebrith, delivery, Portugal

Presenter name: Fernanda Vilela

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Peripartum hysterectomy - A Case Report

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Introduction

The pregnant uterus has vascular supplies that are at risk of trauma during delivery. Puerperal hematomas occur in 1:300 to 1:500 deliveries and most arise from bleeding lacerations. Although small hematomas may be asymptomatic, most are associated with pain, mass effects and hemodynamic instability.
Placenta percreta - chorionic villi penetrate through the myometrium to the uterine serosa or adjacent organs – has an incidence of 7%, and the risk is linked to the number of previous cesarians and placenta previa. Women are at high risk of severe morbidity and the definitive diagnosis can be made only at surgery.

Materials and Method

Information taken from the patient's medical record.

Results

The authors present a clinical case of a 32 years old woman with no relevant medical or surgical antecedents, 39 weeks and 5 days pregnant, with a previous normal delivery. All pregnancy was uneventful. The labour took 5 hours, with almost no pain due to epidural anaesthesia. The delivery was a vacuum assisted delivery due to a prolonged second stage of labor - apparently no complications were register during the delivery and placental extraction. The newborn weight was 3490g, male and Apgar score 9/10. 8 hours after the delivery, the patient presented with symptoms of hemodynamic instability - pallor, weakness with tachycardia and hypotension. The uterus was large, hypotonic with persistent vaginal bleeding. In the ultrasound it could be seen a large puerperal uterus with a mass between the uterus and the bladder, with 5cm of larger diameter. Lab results showed an hemoglobin level of 6,3 g/dL, hematocrit of 19,9% and 95000 platelet count with normal renal function and coagulation values. After uterine massage, uterotonic drugs, inspection of the vagina and cervix to exclude lacerations – a laparotomy was performed.
Intraoperatively – uterine atony and a large retroperitoneal hematoma with increasing size and bulging of the broad ligament. The exact bleeding point was not identified and to control the uterine hemorrhage and the hematoma size an hysterectomy was done as last resort to stabilize the patient.
Postpartum histological findings showed placental percreta.

Conclusion

The management of puerperal hematomas is based on practice patterns established over the years. The literature is inconclusive regarding the benefits of conservative treatment versus surgical intervention. Retroperitoneal hematomas are a rare complication but must be promptly identified. Are typically caused by injury to branches of the hypogastric artery - but the identification of an isolated bleeding point is often impossible. Laparotomy is required in virtually all cases. Most of these patients are hemodynamically unstable and laparotomy should be performed if the woman is not stable enough to wait for the embolization procedure. Hysterectomy is the last resort for treatment of atony, and should not be delayed in women who require prompt control of uterine hemorrhage to prevent death.
The differential diagnosis of postpartum vaginal bleeding might occur only after its resolution. Placenta percreta is a potentilly life-threatening obstetric condition. Poorly controlled hemorrhage related to placenta accreta/increta/percreta is the indication for one to two thirds of peripartum hysterectomies. No single diagnostic modality determines the prenatal diagnosis of placenta accreta with absolute accuracy. In the presented case the diagnoisis was made due to histological findings.

Key words: Retroperitoneal hematomas; atony; placenta percreta
Presenter name: Mariana Miranda

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Immediate vs. Deferred induction in term premature rupture of membranes, with or without antibiotic prophylaxis – preliminary results of a prospective study

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Introduction

Approach to premature rupture of membranes (PROM) at term remains controversial, occurring in 8% of pregnancies. Several studies have shown that expectant management beyond 24 hours raises the incidence of chorioamniotitis and neonatal sepsis*. Antibiotic prophylaxis seems to reduce these complications, but there is no formal recommendation for routine prophylaxis; moreover, the benefit of antibiotics was not shown when expectant management lasted less than 12h. Induction of labour may be another strategy to reduce infectious morbidity, as it may reduce time until delivery (PROM_Deliv). TermPROM Study showed that expectant management raised the incidence of chorioamniotitis. Doubt remains on whether association of prophylactic antibiotics and induction of labour is beneficial.

Objectives:

To evaluate maternal and neonatal outcomes, when comparing immediate vs. differed induction of labour (after 12 hours), with or without prophylactic antibiotics in term pregnancies with PROM.

Materials and Method

A randomized controlled non-blind trial is being conducted at our institution including term singleton pregnancies with PROM, cephalic presentation and negative vaginal/rectal cultures for group B Streptococcus. Trial was accepted by the ethic committee. Women are randomized into four groups: immediate induction of labour (<12hours) with antibiotic prophylaxis (A1), immediate induction without prophylaxis (A2), delayed induction (12 hours after PROM) with antibiotic prophylaxis (B1) and delayed induction without prophylaxis (B2). Maternal and neonatal infection rates (defined by clinical and laboratorial criteria) were the primary outcomes analysed.

Results

This first interim analysis included 140 women (A1-n=34; A2-n=28; B1-n=41; B2-n=37). There were no significant differences on maternal age, race, parity, body mass index or gestational age between groups. Incidence of maternal infection (chorioamniotitis and/or endometritis) did not differ significantly among the four groups (A1-2,1%; A2-3,6%; B1-0,7%; B-2,1%; p=0,145). Neonatal infection did not differ as well. Only one case of chorioamniotitis occurred with less than 12 hours of PROM. A receiver-operating characteristics (ROC) curve analysis was performed to evaluate discriminatory ability of PROM_Deliv to identify positive cases of maternal infection (AUC=0,767); a cut-off value of 28h was found as relevant to detect those cases (RR 1,69; 95% CI [1,581-18,439]). Caesarean section rate also did not differ between groups.

Conclusion

This interim analysis did not find a statistically difference when comparing immediate vs. deferred induction of labour, with or without prophylactic antibiotics in term pregnancies with PROM. Trial will continue until the full recruitment of 600 women is achieved.

Key words: PROM_Deliv, Premature rupture of membranes, Antibiotic prophylaxis, Chorioamnionitis

Presenter name: I. Rato

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Haemostasis system condition at women with the placental insufficiency

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Introduction

The development of the placental insufficiency (PI) can be caused by maternal thrombophilic conditions through disruption of maternal-placental blood flow (MPBF). Increased risk of thromb formation disrupts the process of formation and further functioning of placenta, which is clinically manifested by embryonic or reproductive loss, pre-eclampsia (PE), pre-mature abruption of normally located placenta (PANLP), intrauterine fetal restriction (IUFR) and fetal hypoxia.

Aim: Comparative analysis of the hemostasis system condition and clinical-anamnestic data in women with placental insufficiency and reproductive losses in anamneses.

Materials and Method

A retrospective examination of medical documentation from the archives of the Republic specialized scientific-practice medical center of obstetrics and gynecology (the RSSPMCOG) in Tashkent for the period 2006-2010 years was conducted. During the retrospective analysis of archive materials, the course of gestation, frequency of obstetrical complications causing reproductive losses as well as conditions of the system of hemostasis in pregnant women according to laboratory analysis were examined.

Results

The condition of blood coagulation system was examined in 1244 women who were in different periods of gestation at the moment of research. Their age varied from 21 to 37,11% of pregnant women among the total population were diagnosed with APS. 13% of them had gestation burdened with the threat of pre-mature miscarriage; 12% had a threat of non-developing pregnancy; 2% had preeclampsia and a threat of immature birth. The course of the ongoing pregnancy was burdened in 25 and 13% of cases with the threat of premature miscarriage and premature birth respectively. 15% of women were admitted with non-developing pregnancy and 11% had miscarriage. The course of gestation in women in the second half of gestation was burdened with the threat of LD, PE, prenatal hypoxia and ADS. Evaluation of the condition of the system of hemostasis was performed according to 6 major parameters: determination of activated partial thromboplastin time (APTT), prothrombin time (PT), concentration of soluble fibrin monomer complex (SFMC) and fibrinogen, amount of thrombocytes. When summarizing the obtained laboratory data deviations from the norm of average indicators of hemostasis parameters corresponding to gestational term were not observed. However, after the conduct of comparative analysis of the obtained results of hemostasiological examination according to the type of obstetrical complication and every parameter of hemostasiogram, a different data was obtained. Thus, the increase of concentration of soluble fibrin monomer complexes is higher than normal indicators in 80% of women with AFD, in 76% of cases in women with AFD, in 62% of women with a threat of UM premature birth, in 58% of women with a threat of premature miscarriage, and only in 36 and 26% of cases in women with NDP and APS respectively. The concentration of fibrinogen increased over the norm in almost half of women with AFD and in pregnant women with a threat of LD as well as in women with premature miscarriage and premature birth in 40 and 28% of cases respectively. Under APS, its concentration increased in 22% of cases. The shortening of activated partial thromboplastine time and prothrombin time under every pathology was noted in almost similar frequency

Conclusion

The results of our research demonstrate the revelation of activation of intra-vascular blood coagulation in most examined women who didn't have APS. The majority of cases were pregnant women with reproductive losses, who were in the first half of gestation, multigravidas with acute burdened anamneses and more than half of them revealed APS. Apparently, earlier reproductive losses in the given women were determined by the defect of implantation against the background of existing APS. The given condition requires thorough research of the role of thrombophilia in the process of implantation

Key words: hemostasis, pregnancy loss

Presenter name: Shirinhon Yuldasheva

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HAEMOCOAGULATION CONDITION AND THE RISK OF POSTOPERATIVE THROMBOTIC COMPLICATIONS IN WOMEN WITH UTERINE MYOMA

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Introduction

Postoperative thromboembolic complications are the most frequent pathology at gynecological patients

Materials and Method

To estimate of influence of operative treatment to the haemocoagulation and the risk of thrombogenesis in women with uterine myoma 158 case histories of women with the uterine myoma, performed uterine extirpation with its appendages, or without them in the Department of operative gynecology of the RSSPMC O&G during from 2005 up to 2008 years were studied. In the general number of investigated patients 115 of them were women aged after 40 (I group), 9 were below 40 years (II group). All patient besides antithrombotic nonspecific methods, received pharmacological prophylaxis with unfractionated heparin (UFH) in dosage of 2500 ID s/c each 8 hours prior to and on the postoperative period. Estimation of the hemostasis state is conducted in dynamics prior to and on 1st, 3rd, 7th days of the postoperative period in laboratory of hemostasis of RSSPMC O&G which included in itself definition: activated partial thromboplastin time (APTT), prothrombin time (PT), prothrombin ratio (PR), international normalised ratio (INR), concentration soluble fibrin-monomer complexes (SFMC) and fibrinogen, amount of platelets.

Results

In the postoperative period, we have noted the tendency to increasing of hypercoagulation, despite spent thromboprophylaxis with UFH. About this testified statistically significant ($p < 0,05$, M±s.d) changes of parameters of a haemostasis. At the I group patients average initial meanings of SFMC (4,1 mg of %) on admitting to the hospital in comparison with control (2,8±1,3мг %) was on 42,8 % more ($p<0,05$). Dynamics analysis coagulogram in women from I group on the 7th days in the postoperative period has shown, that in women with uterus myoma aged after 40 years, at performing uterine extirpation against spent thromboprophylaxis with UFH there revealed increasing of fibrinogen concentration on 53,5 % (4,3±0,7 g/l), SFMC on 82,5% (7,5±0,6 mg%), with simultaneous shortening ATTP on 15,6% (31,8±6,3 сек) in comparison with initial level which was before operation (2,8±0,6g/l, 4,1±1,1mg%, 37,7±5,2 sec accordingly). In difference from I group, in II group patients, initial meaning of SFMC on admission was increased insignificantly in comparison with control group. The highest meaning of SFMC were observed on the 3rd day (5,7 mg%), which have decreased by 7th day (4,7мг %) in the postoperative period and in comparison with initial level (3,8 mg of %) was on 50 % and in comparison with control it was on 2,03 times more. As, in this group patients postoperative increasing of fibrinogen concentration not observed, although on 7th days in the postoperative period it's noted shortening of APPT (31,8±6,3) on 19,3% less in comparison with its initial level (38,7+3,1 sec).

Conclusion

Thus, in women with uterine myoma aged after 40 years, which exposed to operative treatment, haemocoagulation changes reflect acceleration intravascular blood curling. After operative intervention develops prethrompotic condition, which is appeared with synchronic increasing of concentration SFMC, fibrinogen and simultaneous shortening APTT. Thus, thromboprophylaxis with UFH in these contingent patients does not allow result of coagulation potential in initial level, which they had before operation.

Key words: uterine myoma, hemostasis, thromboembolic complications

Presenter name: Nodira Mamadjanova

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INFLUENCE OF MYOCARDITIS TO THE MATERNAL HAEMODINAMICS AND FETOPLACENTAL SYSTEM CONDITION

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Introduction

The cardio-vascular system diseases in pregnant women take a leading place among the all extra-genital pathology.

Aim: Comparative evaluation of the maternal gemodynamics and feto-placental complex conditions in pregnant women with post-influenzal myocarditis.

Materials and Method

128 pregnant women aged about 17-37 years with postinfluenza myocarditis, who admitted for consultation to the clinic of the Republican specialized scientific-practice medical center of obstetrics and gynecology (the RSSPMCOG), Tashkent were observed. Central maternal haemodinamic condition is estimated by echocardiography (EchoCG) method. The feto-placental complex and fetus condition were estimated by the dopplerometric examination.

Results

At the moment of consultation more than half of pregnant women (53%) were on the 2nd trimester of gestation. More than half of pregnant women were aged 20 to 29 years, every 5th woman was aged 30 to 34 and every 10th woman was aged 35 to 40 years. Only 4% of the total population was women, aged below than 20 years old. There were only 72% of pregnant women had complaints. At 28% of them were primarily diagnosed myocarditis during the consultation with cardiologist. The most common complaints among pregnant women were shortness of breath (61%), heartbeat (55%); in rare cases there was fatigue, weakness and vertigo. There were single complaints from 27% of pregnant women and others had combination of several complaints. Frequent complications of the course of gestation were the threat of immature birth and early abortion reveled in nearly every 2nd pregnant woman in the second and third trimester. During the evaluation of intra-cardiac hemodynamics the following data was obtained: the more frequent symptom of disruption of intra-cardiac hemodynamics was mitral regurgitation, which in most cases was revealed in pregnant women aged 20-29 and 35-40. Revealing of tricuspid regurgitation was typical for women aged 15-19 and 35-40 and was reveled in every 5th and 6th woman respectively. The results of EchoCG examination showed the increase of ejection fraction with simultaneous increase of myocardial index at 68% pregnant women. Comparative evaluation of the peculiarities of contractile function of the left ventricle showed that most pregnant women with the increased ejection fraction of the left ventricle were aged 15-19 and 35-40 years. It was typical that the older a woman was, the higher chance of the increase of ejection fraction was there. Interesting data was obtained during comparative study of the results of dopplerometric examination of utricular placental fetal blood flow and the condition of systolic function of the left ventricle of a mother. Hence, the women with the increased ejection fraction (>70%) revealed disruption of the blood flow in uterus arteries in 64% of cases; in 18% of cases there was disruption of placental blood flow and in 12% of cases there was disruption of uterus placental blood flow. At 88% of women developed prenatal hypoxia. However, pregnant women with myocarditis and against the background of normal indicators of ejection fraction also revealed disruption of hemodynamic in the feto-placental complex. Disruption of blood flow in the uterus arteries was revealed in 14% of women and disruption of placental blood flow was revealed in 10% of patients. Disruption of uterus placental blood flow was noted in 4% of cases. 67% of pregnant women had the course of pregnancy against the background of prenatal hypoxia. The obtained data once again confirms that the main role in the basis of development of placental insufficiency during myocarditis is taken by disruption of maternal hemodynamic determined by the given pathology.

Conclusion

Thus, myocarditis developing during pregnancy is a threat to life of mother and fetus, which requires further research in order to develop a tactic of pregnancy and delivery keeping. Central maternal hemodynamic during myocarditis is characterized by disruption of contractile function of the left ventricle that is the basis for development of a range of obstetrical and perinatal complications.

Key words: myocarditis, hemodinamics, placental insufficiency

Presenter name: Mehriban Dauletova

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Perineal pain relief therapies after vaginal birth

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Introduction

The perineal pain is a common morbidity after vaginal birth with perineal trauma. The perineal pain can interfere with women's self-care capacity and impair the interaction with the newborn. This study aimed to identify the types of therapies used in the treatment of perineal pain after vaginal birth and verify the indication, technique and length of application of cryotherapy.

Materials and Method

This is a survey on the use of therapies for treating perineal pain after vaginal birth, conducted in 30 hospitals included in the National Health System in São Paulo city, Brazil. In each service a nurse or midwife who provides direct care to postpartum women was interviewed. The variables analyzed were related to the characterization of the institution, professional qualification, method used for the relief of perineal pain, administration criterion of drug therapies, indication and contraindication to the use of cryotherapy, mode and technique used for the use of therapy time application, pause between applications and barriers or difficulties in the use of ice. Descriptive analysis were carried out, calculating absolute and relative frequencies for qualitative variables and measures of central tendency and dispersion for quantitative variables. The study was approved by the Ethics in Research Committee of the School of Nursing, University of São Paulo.

Results

Nurses and midwives use pharmacological and non-pharmacological methods for relief of perineal pain, although none of the institutions have a protocol defined to the use of non-pharmacological therapies. Among the drugs administered orally, highlighted are the use of analgesics (93.3%) and non-steroidal anti-inflammatory drugs (70%). Institutions use one or more methods for perineal pain relief. The drug administration criteria for relief of perineal pain were: complaints of postpartum women (43.4%), routine prescription (30%), routine prescription and complaints of postpartum women (23.3%) and one institution does not administer medications (3.3%). Among non-pharmacological methods most used are cryotherapy (63.3%), local heat (10%), and only one maternity used topical anesthetic spray (Andolba®). The main indication for the use of cryotherapy was edema, followed by hematoma and pain. The ice exposure time ranged from 10 to 30 minutes and the pause between applications was 3 to 8 hours. The most common technique was ice cubes inside the latex glove (47.4%).

Conclusion

It was verified that there was a higher prevalence of drug use in the control of perineal pain postpartum and a much less frequent use of non-pharmacological therapies, represented by cryotherapy. Considering the advantages of non-pharmacological therapies, it is necessary to develop protocols to ensure the safe and effective use, especially cryotherapy.

Key words: Perineal Pain; Cryotherapy; Vaginal Birth
Presenter name: Sonia Maria Junqueira Vasconcellos de Oliveira

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MIDWIVES INTRAPARTUM CARE WORK ORGANISATION AFTER RESTRUCTURING AT THE LARGEST DELIVERY CENTER IN LATVIA

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Introduction

Riga Maternity Hospital is largest obstetric and prenatal care institution in Latvia. Riga Maternity Hospital has almost 70 years of pregnancy, intrapartum and postpartum care experience. There are about 7000 babies born each year, it`s 1/3 of all newborns in Latvia. The main goal for restructuration was to make care more safer and more patient friendly.On the 2012. restructured Delivery Center with 12 rooms started to work instead of three smaller units in three different departments. As the historical way of work was that the doctor is providing care in delivery. From the year 2014. midwives independently can manage physiologicall deliveries.

Materials and Method

Leading obstetricions, gynecologists and midwives came together for making the protocol for independent midwives delivery management.

Results

At the moment there are about 35% of all deliveries - managed independently by the midwives. Previously it was %.

Conclusion

Has made a big step forward for promoting independent midwives work organization. Changes in work organization have raised the quality of care in delivery and patient satisfaction with the services received.

Key words: Delivery, work organization, independent midwife work

Presenter name: Ilze Ansule

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PHARMACOLOGICAL AND NON-PHARMACOLOGICAL TECHNIQUES FOR PAIN RELIEF DURING DELIVERY

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Introduction

Pain experienced by a woman during the delivery is likely to be the most severe she will experience in her lifetime. Therefore, the management of labor pain and its effective relief has become an important part of obstetric medicine.

Pain is affected by individual's emotional, motivational, cognitive, social and cultural circumstances and its intensity varies among women and each labor, but most women require pain relief.

The aim of this study is to review last recommendations about the management strategies for delivery pain, including pharmacological and non-pharmacological interventions most frequently requested.

Materials and Method

We conducted a literature search through the databases Pubmed and UpToDate, using as key words “pain”, “delivery”, “management”, “non-pharmacologic”, from published studies between 2010 and 2015. As main outcomes, our literature search provided two systematic reviews, one meta-analysis and two descriptive reviews.

Results

These were the main pan relief strategies reported in our literature search.

Non-pharmacologic techniques:

- Childbirth education: By individual or group classes, it helps women and their partner, among others, to identify and understand pain control.
- Maternal movement and positioning: Laboring women’s pelvic dimensions can vary by walking, moving or changing positions, thus these changes may help to ameliorate labor pain and accelerate labor progress.
- Water immersion: Immersion bath in warm water is thought to improve relaxation and reduce labor pain. The water should not increase the woman's temperature so it should be monitored.
- Sterile water injection: Water blocks consist of four intracutaneous or subcutaneous injections of 0.05 to 0.1 mL sterile water to decrease pain in the lower back, which is estimated to occur in 15 to 74 percent of all labors.

Pharmacologic techniques:

- Systemic analgesics: they can be used when patient preferes less invasive techniques or if another one is not available. This group is composed of opioids, sedatives and nitrous oxide. Systemic analgesics often have side-effects such as sedation and respiratory depression.
- Local injection techniques: Pudendal and paracervical blocks are used to alleviate pain from vaginal and perineal distension during the second stage of labor, and also cervical dilation.
- Neuraxial analgesia: Neuraxial techniques provide pain relief for labor and delivery. The advantage of obstetric spinal procedures is a good analgesia with no maternal or fetal sedation, allowing the mother to participate actively in the birth and remain conscious.

Conclusion

1. Non-pharmacological pain management appears to be safe for women and their infants, but the efficacy of these interventions is limited.
2. Systemic opioids may be the only option in settings with limited resources, or if regional analgesia is contraindicated.
3. Neuraxial analgesia provides effective pain relief but it increases the probability of instrumental vaginal birth.
4. Regional analgesic techniques are the most reliable means of relieving the pain of labor and delivery.

Key words: PAIN, DELIVERY, MANAGMENT, NON-PHARMACOLOG

Presenter name: BELÉN SHAHROUR ROMERA

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Women's experiences during vaginal delivery in a secondary public hospital in São Paulo-Brazil: obstetric interventions.

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2 Hospital Municipal Vereador José Storopolli - Vila Maria; São Paulo, Brazil

Introduction

Objectives: The objective was to describe the maternal experience during vaginal delivery in a secondary public hospital in São Paulo-Brazil, describing the obstetric interventions performed during labor.

Materials and Method

This study was conducted in a university secondary public hospital. Sixty-nine women who had vaginal delivery were interviewed in the postpartum period. The inclusion criteria were: single pregnancy childbirth, live neonate, delivery above 34 weeks gestation, no clinical or obstetric complications, understanding of research method and agreement to participate in the study. The questionnaire included sociodemographic questions and obstetric data were collected from birth records. A written informed consent for participation in the study was obtained from all participants. The study was approved by the local Human Research Ethics Committee (CAAE 31557814.0.0000.5505).

Results

This study involved 69 women. The mean maternal age was 24.8 years (SD= 6.1 y), 36 were white people (52.2%), 26 nulliparous (37.7%), and 30 (43.5%) women reported having only elementary school. The vast majority (97%) received prenatal care, which began in mean gestational age of 14 weeks (SD=7.3 weeks). The habit of smoking cigarettes was reported by 8 (11.6%) women, alcohol beverages consumption by 11 (15.9%) and the use of illicit drugs by 4 (5.8%). The mean gestational age at delivery was 39.2 weeks (SD=1.4 weeks), 4 (5.8%) preterm deliveries less than 37 weeks, and 20 (29%) above 40 weeks. The presence of a person accompanying the woman during birth was reported for only 12 (17.4%) women. Forceps delivery occurred in 5 (7.2%) women. The followings interventions were performed in the study population: 7 (10.1%) use of misoprostol for cervical ripening, use of oxytocin 41 (59.4%), regional analgesia 5 (7.2%), pudendal nerve anesthesia 10 (14.5%), and episiotomy 23 (33.3%). The mean birth weight was 3221g (SD=462g) and Apgar score <7 at 5 min was reported in 4 (5.8%) newborns.

Conclusion

The obstetric management in the vaginal childbirth attendance in secondary public hospital shows a high rate of intrapartum interventions. Efforts are required to improve the concepts and the management in obstetric care in childbirth.

Key words: Childbirth experience, quality improvement
Presenter name: Roseli Nomura

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Influence of mode of delivery in the women's satisfaction in childbirth in a secondary public hospital in São Paulo-Brazil

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2 Hospital Municipal Vereador José Storopolli - Vila Maria; São Paulo, Brazil.

Introduction

Objectives: The objective was to examine the influence of mode of delivery in the women's satisfaction in childbirth in a secondary public hospital in São Paulo-Brazil and to examine the association with selected variables.

Materials and Method

Methods: This study was conducted in a university secondary public hospital. One hundred and one women who gave birth in the hospital were interviewed in the postpartum period. The inclusion criteria were: single pregnancy childbirth, live neonate, delivery above 34 weeks gestation, no clinical or obstetric complications, understanding of research method and agreement to participate in the study. The questionnaire included sociodemographic questions and obstetric data were collected from birth records. Women were invited to answer a questionnaire with 20-items measuring childbirth satisfaction (5 subscales: self, 5 items; partner, 1 item; baby, 3 items; physician, 7 items; overall, 4 items) and two additional questions about birth experience. The degree of satisfaction with each item was indicated on a Likert scale with 5 points and birth experience questions on a scale of 4 points. A total score was calculated (sum of the scores for each individual question, maximum=98). Internal consistency reliability coefficient (Cronbach's alpha) for this study was 0.881 (95% lower CI=0.852). A written informed consent for participation in the study was obtained from all participants. The study was approved by the local Human Research Ethics Committee (CAAE 31557814.0.0000.5505).

Results

Results: This study involved 101 women. The cesarean sections were performed in 32 of them (31.7%). In the studied population, the mean maternal age was 25.4 years (SD= 6.0y), 51 were white people (50.5%), 40 nulliparous (39.6%), the habit of smoking cigarettes was reported by 12 (11.9%) women, alcohol beverages consumption by 14 (13.9%), the use of illicit drugs by 4 (4.0%), the mean gestational age at delivery was 39.3 weeks (SD=1.4 weeks), the presence of a person accompanying the birth was reported for only 18 (17.8%) women. These variables did not differ between the groups according to the mode of delivery. The women in the group of cesarean, when compared to the group of vaginal delivery, no significant differences was found in the analysis of subscales: satisfaction with self (median 21.5 vs. 21, p=0.174); satisfaction with partner (median 4 vs. 5, p=0.168), satisfaction with baby (median 13 vs. 13, p=0.576); satisfaction with doctor (median 31 vs. 32, p=0.593), overall satisfaction (median 16 vs. 15, p=0.613); total score (median 84.5 vs. 85; p=0.579).

Conclusion

Conclusion: The women's satisfaction in childbirth is not influenced by the mode of delivery in a secondary public hospital in São Paulo-Brazil.

Key words: Childbirth experience, patient satisfaction, cesarean
Presenter name: Roseli Nomura

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Women's experience and overall satisfaction in childbirth in a secondary public hospital in São Paulo-Brazil

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1 Department of Obstetrics, Escola Paulista de Medicina, Federal University of Sao Paulo, São Paulo, Brazil.
2 Hospital Municipal Vereador José Storopolli - Vila Maria; São Paulo, Brazil.

Introduction

Objectives: The objective was to examine the women's experience and overall satisfaction in childbirth in a secondary public hospital in São Paulo-Brazil and to examine the association with selected variables.

Materials and Method

This study was conducted in a university secondary public hospital. One hundred and one women who gave birth in the hospital were interviewed in the postpartum period. The inclusion criteria were: single pregnancy childbirth, live neonate, delivery above 34 weeks gestation, no clinical or obstetric complications, understanding of research method and agreement to participate in the study. The questionnaire included sociodemographic questions and obstetric data were collected from birth records. Women were invited to answer a questionnaire with 20-items measuring childbirth satisfaction (5 subscales: self, 5 items; partner, 1 item; baby, 3 items; physician, 7 items; overall, 4 items) and two additional questions about birth experience. The degree of satisfaction with each item was indicated on a Likert scale with 5 points and birth experience questions on a scale of 4 points. A total score was calculated (sum of the scores for each individual question, maximum=98). Internal consistency reliability coefficient (Cronbach's alpha) for this study was 0.881 (95% lower CI=0.852). The overall satisfaction was characterized when the woman answered satisfied or very satisfied to the question: 'overall, how satisfied or dissatisfied are you with your childbirth experience?' A written informed consent for participation in the study was obtained from all participants. The study was approved by the local Human Research Ethics Committee (CAAE 31557814.0.0000.5505).

Results

This study involved 101 women of whom 11 (10.9%) reported that overall satisfaction was partially or not met. In the studied population, the mean maternal age was 25.4 years (SD= 6.0y), 51 were white people (50.5%), 40 nulliparous (39.6%), the habit of smoking cigarettes was reported by 12 (11.9%) women, alcohol beverages consumption by 14 (13.9%), the use of illicit drugs by 4 (4.0%), the mean gestational age at delivery was 39.3 weeks (SD=1.4 weeks), the presence of a person accompanying the birth was reported for only 18 (17.8%) women, cesarean was performed in 32 (31.7%). These variables did not differ between the groups who reported or not overall satisfaction. Among the women in the group in which overall satisfaction was partially or not met, 72.7% reported having only elementary school education (n = 8), significantly higher proportion (p = 0.02) than women who met overall satisfaction (n = 32, 35.6%). The analysis of subscales demonstrated that the group in which overall satisfaction was partially or not met presented significantly lower scores when compared to the group that met satisfaction: satisfaction with self (median 19 vs. 21, p=0.025); satisfaction with baby (median 12 vs. 14, p=0.010); satisfaction with doctor (median 27 vs. 32, p=0.002), total score (median 76 vs. 86; p<0.001). Logistic regression analysis identified as an independent variable related to overall satisfaction, the score of the subscale satisfaction with doctor (corrected p=0.028, OR=1.20, CI95%=1.02 to 1.41).

Conclusion

Overall satisfaction of women in childbirth was partially or not met in 11% of subjects. The women's experience in childbirth in a secondary public hospital is related to the obstetrical care provided by doctors. Efforts are required to improve the concepts and the management in obstetric care in labor ward.

Key words: Childbirth experience, patient satisfaction, cesarean, quality improvement
Presenter name: Roseli Nomura

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Preventing severe perineal trauma: the possible impact of skills training for midwives in the Netherlands

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Introduction

Introduction: Obstetric anal sphincter injuries (OASIS) occurs in approximately 3.7% of primipara and in 1.8% of multipara in the Netherlands. Previous studies identified a correlation between the angle of episiotomy and the risk of OASIS, with a smaller angle from the midline posing a greater risk. Furthermore, a study from United Kingdom exploring episiotomy dimensions drawn on a perineum picture identified differences between doctors and midwives, with midwives not only drawing smaller episiotomies, but also with a smaller angle from the midline. We evaluated the effect of a midwifery training program concerning perineal trauma on the quality of episiotomy dimensions.

Materials and Method

Materials and Methods: In 2014, three single day trainings for midwives concerning perineal trauma were organized in the Netherlands. The training consisted of a combination of lectures and hands on workshops about perineal anatomy, risk factors and prevention for OASIS and perineal repair techniques. Before start of the training, participants were asked about practice (community or hospital midwives) estimated number of deliveries per year (50) episiotomy (per year) and OASIS (per 5 years). In addition they were asked to draw an episiotomy on a perineal picture of a crowning head on an scale of approximately 1:3. After the training they were again asked to draw an episiotomy on a new perineal picture. Episiotomy dimensions (length (mm), angle from the midline (degrees) and distance from the midline(mm)) were measured and dimensions were compared before and after the training. Optimal episiotomy was defined when angle from the midline was between 45 and 70 degrees. Statistical analysis was performed using SPSS version 20.0, with students-t test for normal distribution and Fisher's exact test for categorical data.

Results

Results: A total of 135 midwives followed one of three trainings, 111 (82.2%) community midwives, 9 (6.7%) hospital midwives and 15 not filled (11.1%). Working experience was filled in 123 (91.1%) cases and varied with 26 (21.1%) < 5 years, 26 (21.1%) 5-10 years, 36 (29.3%) 11-20yrs and 35 (28.5%) >20 years. Per midwife, the median number of episiotomy per year was 3.0 (range 0-20) and the median number of OASIS per five years was 2.0 (range 0-15). Of 98 community midwives, 35.3% set >4 episiotomies per year compared to 87.5% of 8 hospital midwives ($p<0.05$) and 60.0% identify ≥2 OASIS per 5 year compared to 87.5% of hospital midwives ($p<0.05$).

From 125 cases (92.6%) episiotomy drawings were available from both before and after the training. The degree of angle from the midline was significantly different before (49.4 (SD 12.5)) as compared to after the training (58.0 (SD 10.8) ($p<0.01$). This was not the case for hospital midwives (53.1 (SD 19.9) to 56.0 (SD 13.0)). An optimal episiotomy was made in 72 (55.4%) before and in 99 (76.7%) after the training ($p<0.01$).

Conclusion

Conclusion: Approximately half of episiotomy as drawn by Dutch midwives have an optimal angle from the midline and training significantly increases this to over 3/4. On average, community midwives estimated to set less than 4 episiotomies annually and identify 2 cases of OASIS every five year. Regular tuition and training of perineal trauma identification and repair is needed. Whether this training will influence clinical practice needs further evaluation.

Key words: episiotomy, training, evaluation, midwives, Netherlands

Presenter name: Jeroen van Dillen

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How to reduce caesarean section rate? Implications of new technologies in fetal monitoring during labour.

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Royal Gwent Hospital, Newport, Wales, United Kingdom

Introduction

Fetal ST segment analysis (STAN) technology was invented in Sweden and is used widely across Scandinavian countries and the UK. Conventional interpretation of CTG with pattern recognition can lead to unnecessary interventions such as fetal blood sampling (FBS) and early caesarean section (CS). Understanding fetal physiology allows interpretation of the CTG in relation to exposure to hypoxia and whether the fetus can cope or is using compensatory mechanisms. The aim of STAN is to help to lessen hypoxic injury and decrease unnecessary interventions on fetuses with normal oxygenation. We strongly believed that STAN monitoring with fetal physiology interpretation should reduce our CS rate and improve fetal outcome. The aim of our study is to show how appropriate introduction of new technologies can significantly improve intrapartum care. We would like to share our experience, and difficulties we have overcome, to introduce STAN to our unit and its implication on the feto-maternal outcome.

Materials and Method

Prior to official implementation of SATN technology, our midwifery staff and doctors underwent training in STAN and fetal physiology assessment at St George's hospital. Those who could not attend have received training in house by the St Georges labour ward lead, where STAN monitoring has been established for many years or have undertaken online training. We also have a team of dedicated consultants and trainees who are providing teaching and continuously review the CTG traces and fetomaternal outcome.

We have conducted a retrospective analysis of emergency CS (emCS) deliveries between October 2014 and January 2015. We reviewed patients' notes, collected data and used excel for analysis. During that time 113 elective CS (elCS) and 214 emCS were performed. The aim of the study was to compare intervention and CS rates pre- and post- STAN introduction and to identify avoidable factors to reduce CS rate.

Results

We have compared data pre- and post- introduction of STAN. The cohort of patients was similar throughout with, on average, 349 deliveries per month. Whilst we recognise it is still 'early days', we have noticed that our emCS rate has decreased, with a significant reduction in emCS due to fetal distress, therefore improving our overall CS rate to 20% and less. Our overall CS rate has been gradually decreasing and continues to maintain falling trend. We have also observed a decrease in the number of FBS's performed to almost 0% and increase instrumental deliveries to 11-12%. Pre introduction of STAN 25-30% of emCS were performed for fetal distress, this has decreased to 13-16% since STAN and fetal physiology interpretation were introduced. After thorough retrospective analysis it is our opinion that some of these emCS could have been prevented. For example, recovery of bradycardia (<10mins) in theatre, or CTG analysis with persistent decelerations causing fear amongst staff. We have also analysed the fetal outcome and there were no incidences of fetal hypoxic associated with correct use of STAN and interpretation of fetal physiology. The vast majority of women monitored with STAN achieved normal vaginal or instrumental delivery with a minority needing emCS for failure to progress. Whilst we appreciate the time frame thus far is short, we have shown a significant reduction in our emCS for fetal distress with no fetal hypoxia and continue to analyse our delivery figures going forward in the belief that we could present very promising data.

Conclusion

We introduced STAN in stages to ease the transition process, using only the CTG function until staff was confident with the equipment before commencing STAN. Nonetheless there were still issues to overcome. The most difficult was the anxiety regarding new monitoring and reliability particularly with suspicious and pathological traces. After analysis of traces it was apparent amongst midwives and obstetricians that outcomes have changed as a result of STAN monitoring. This would have included earlier interventions before introduction of STAN with, for example, FBS or CS delivery for a pathological trace rather than try to explain fetal physiology and act to improve fetal well-being. However, with perseverance and good fetal outcomes the suspicious and pathological CTGs are no longer creating fear and unnecessary panic.

STAN monitoring of fetal physiology has been shown to improve fetomaternal outcome and reduction in CS rate in our unit. Mutual effort and dedication of the team and increasing knowledge and confidence are essential to maintain high standards of care and safety while introducing new technologies. It is still 'early days' but preliminary findings suggest a reduction in our emCS rate with no evidence of compromise of fetal safety. We are continuously reviewing our CS rate and identifying factors that can contribute to reduction of emCS and also elCS.

Key words: STAN,Caesarean section, fetal physiology, training

Presenter name: Ewelina Rzyska

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Monitoring adverse effects to the use of off-label drugs. A Danish case study

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Metropolitan University College
Department of Midwifery

Introduction

The National Council on the Use of Expensive Hospital Medicine (Rådet for Anvendelse af Dyr Sygehusmedicin (RADS)) recommend
Angusta/misoprostol for induction of labor. Angusta is not registered in Europe, and patient safety is thus compromised.
Post marketing surveillance is the practice of monitoring the safety of a pharmaceutical drug after it has been released on the market. It is an important part of the science of pharmacovigilance. Post marketing surveillance refines, or confirms or denies, the safety of a drug after it is used in everyday practice. Post marketing surveillance uses a number of approaches, including spontaneous reporting databases.
No monitoring procedures were established for off-label drugs at the time misoprostol was first recommended by the Danish Association of Obstetrician. Side effects was not given much attention before women reported them to the press, and the use of misoprostol was discussed in the Danish Parliament.

Materials and Method

Method:
Case study (Ramian 2012; Yin,2003). A wide range of empirical material is used in this analysis. Data on the use of inductions and the use of misoprostol. Data from the National Danish Register on side effects. Reports from The Danish Health Minister, Report from The Legal advisor to the Danish Government, women's account of non-registered side effects in the Danish press, patient's notes, relevant Danish legislation. Descriptions of the reporting system and international legislation. Results from Periodic Security Reports (PSUR).

Results

Women with healthy pregnancies are offered induction with a non-registered drug
The majority of Danish labor wards have a compassionate user permit issued by Danish Health Authorities. This permit allows them to import Angusta from India even though this drug is not registered in Europe.
Extensive underreporting of side effects to misoprostol have been identified. This is recognized by the President of the Danish Obstetric Society and Danish Health Authorities.

Women receive little information about side effects and/or the importance of reporting side effects.

Conclusion

No monitoring procedures were established at the time misoprostol began to be used as an induction agent.
Extensive underreporting of side effects has been identified.
Danish health authorities have included midwives in those professions that have an obligation to report side effects.
The legal Advisor to The Danish Government stresses that patient have a right to know that off-label medication is being used. They should also know that they should report side effects.
There is a an urgent need for international cooperation on the issue of side-effects to misoprostol and other off-label drugs.

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Key words: Post marketing surveillance, adverse effects, induction of labour, non-registered drug, misoprostol, Angusta.
Presenter name: Aaroe Clausen J.

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Can we effectively and safely reduce caesarean section rate? Use of new technologies in fetal monitoring during labour.

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Introduction

Fetal ST segment analysis (STAN) technology was invented in Sweden and is used widely across Scandinavian countries and the UK. Conventional interpretation of CTG with pattern recognition can lead to unnecessary interventions such as fetal blood sampling (FBS) and early caesarean section (CS). Understanding fetal physiology allows interpretation of the CTG in relation to exposure to hypoxia and whether the fetus can cope or is using compensatory mechanisms. The aim of STAN is to help to lessen hypoxic injury and decrease unnecessary interventions on fetuses with normal oxygenation. We strongly believed that STAN monitoring with fetal physiology interpretation should reduce our CS rate and improve fetal outcome. The aim of our study is to show how appropriate introduction of new technologies can significantly improve intrapartum care. We would like to share our experience, and difficulties we have overcome, to introduce STAN to our unit and its implication on the feto-maternal outcome.

Materials and Method

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Key words: STAN, fetal monitoring, caesarean section rate

Presenter name: Ewelina Rzyska

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Multiple ectopic pregnancy: clinical challenge. Report of two cases

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Introduction

Ectopic pregnancy is the main cause of death of the first trimester of pregnancy, with a 2% incidence that's been growing in the last decade.

Multiple ectopic pregnancy is rare, ocorring in 1/125.000 spontaneous pregnancys, and most of the those are monochorionic.

Materials and Method

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Results

Case Report 1:

A 30 year old primigravida, with a medical background of 5 years of secondary infertility, was seen in our department with 8 weeks of amenorrhea complaining of hypogastric pain and metrorrhagia with 1 day of evolution. Ultrasound examination showed a 30mm anechogenic round image bordering the right ovary with a yolk-sac and an 11 mm non-vital embryo. Moderate quantity of free fluid was observed in the Douglas pounch. Due to the high B-HCG level observed (25774 mIU/ml), a laparotomic right salpingectomy was undertaken.

Postoperative pathological examination revealed a single 16 mm gestational sac containing two embryos of 12 and 13 mm respectively.

The patient is being followed in our Reproduction Medicine Unit.

Case Report 2:

A 34 year old primigravida, with a medical background of endometriosis and 18 months of primary infertility, became pregnant after two embryo transfer by assisted reproductive technique (intracytoplasmic sperm injection- ICSI) in our reproductive unit. In her first consultation after pregnancy, transvaginal ultrasound showed a gestational sac in the left adnexal area with four embryos with fetal cardiac activity and crown-rump length for 6 weeks and 2 days. Color-coded Doppler ultrasound demonstrated a 'ring of fire' sign, indicative of intense peritrophoblastic vascular activity surrounding the sac. She was completely asymptomatic, with no pain or vaginal bleeding. B-HCG concentration was 32000mIU/ml. The patient was admitted to the hospital for close surveillance. After initial screening, she began systemic therapy with 50 mg/m2 methotrexate (MTX). Next day, it was decided to inject 100mg of MTX directly into the gestational sac.

On the second day of treatment, transvaginal ultrasound showed a heterogeneous gestational sac, without visible embryos. Peritrophoblastic flow was reduced.

The patient was discharged home on the 16th hospital day in stable condition. Her β-HCG concentration on the day of discharge was 5209mIU/ml. Repeated ultrasound at that time showed a small hyperechogenic mass representing the residual gestational tissue. B-HCG values were measured <10IU/L on 48th day after MTX administration.

The patient is being followed in our Reproduction Medicine Unit and waiting another cycle of ICSI.

Conclusion

The authors present two rare cases of a multiple ectopic pregnancy with tubar location that poses great clinical and sonographic diagnostic challenges. Few of such cases are reported in literature. In the presence of a high B-HCG value other diagnostics could be considered, as the heterotopic pregnancy and the tubar hydatidiform mole.

Key words: Multiple ectopic pregnancy salpingectomy methotrexate

Presenter name: Rita Simões Carvalho

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Can we effectively and safely reduce caesarean section rate?Impact of new technologies in fetal monitoring during labour

E. Rzyska 1; L. Pilkington 2; S. Parveen 3
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Introduction

Fetal ST segment analysis (STAN) technology was invented in Sweden and is used widely across Scandinavian countries and the UK. Conventional interpretation of CTG with pattern recognition can lead to unnecessary interventions such as fetal blood sampling (FBS) and early caesarean section (CS). Understanding fetal physiology allows interpretation of the CTG in relation to exposure to hypoxia and whether the fetus can cope or is using compensatory mechanisms. The aim of STAN is to help to lessen hypoxic injury and decrease unnecessary interventions on fetuses with normal oxygenation. We strongly believed that STAN monitoring with fetal physiology interpretation should reduce our CS rate and improve fetal outcome. The aim of our study is to show how appropriate introduction of new technologies can significantly improve intrapartum care. We would like to share our experience, and difficulties we have overcome, to introduce STAN to our unit and its implication on the feto-maternal outcome.

Materials and Method

Prior to official implementation of SATN technology, our midwifery staff and doctors underwent training in STAN and fetal physiology assessment at St George's hospital. Those who could not attend have received training in house by the St Georges labour ward lead, where STAN monitoring has been established for many years or have undertaken online training. We also have a team of dedicated consultants and trainees who are providing teaching and continuously review the CTG traces and fetomaternal outcome.

We have conducted a retrospective analysis of emergency CS (emCS) deliveries between October 2014 and January 2015. We reviewed patients' notes, collected data and used excel for analysis. During that time 113 elective CS (elCS) and 214 emCS were performed. The aim of the study was to compare intervention and CS rates pre- and post- STAN introduction and to identify avoidable factors to reduce CS rate.

Results

We have compared data pre- and post- introduction of STAN. The cohort of patients was similar throughout with, on average, 349 deliveries per month. Whilst we recognise it is still 'early days', we have noticed that our emCS rate has decreased, with a significant reduction in emCS due to fetal distress, therefore improving our overall CS rate to 20% and less. Our overall CS rate has been gradually decreasing and continues to maintain falling trend. We have also observed a decrease in the number of FBS's performed to almost 0% and increase instrumental deliveries to 11-12%. Pre introduction of STAN 25-30% of emCS were performed for fetal distress, this has decreased to 13-16% since STAN and fetal physiology interpretation were introduced. After thorough retrospective analysis it is our opinion that some of these emCS could have been prevented. For example, recovery of bradycardia (<10mins) in theatre, or CTG analysis with persistent decelerations causing fear amongst staff. We have also analysed the fetal outcome and there were no incidences of fetal hypoxic associated with correct use of STAN and interpretation of fetal physiology. The vast majority of women monitored with STAN achieved normal vaginal or instrumental delivery with a minority needing emCS for failure to progress. Whilst we appreciate the time frame thus far is short, we have shown a significant reduction in our emCS for fetal distress with no fetal hypoxia and continue to analyse our delivery figures going forward in the belief that we could present very promising data.

Conclusion

We introduced STAN in stages to ease the transition process, using only the CTG function until staff was confident with the equipment before commencing STAN. Nonetheless there were still issues to overcome. The most difficult was the anxiety regarding new monitoring and reliability particularly with suspicious and pathological traces. After analysis of traces it was apparent amongst midwives and obstetricians that outcomes have changed as a result of STAN monitoring. This would have included earlier interventions before introduction of STAN with, for example, FBS or CS delivery for a pathological trace rather than try to explain fetal physiology and act to improve fetal well-being. However, with perseverance and good fetal outcomes the suspicious and pathological CTGs are no longer creating fear and unnecessary panic.

STAN monitoring of fetal physiology has been shown to improve fetomaternal outcome and reduction in CS rate in our unit. Mutual effort and dedication of the team and increasing knowledge and confidence are essential to maintain high standards of care and safety while introducing new technologies. It is still 'early days' but preliminary findings suggest a reduction in our emCS rate with no evidence of compromise of fetal safety. We are continuously reviewing our CS rate and identifying factors that can contribute to reduction of emCS and also elCS.

Key words: STAN, fetal monitoring, caesarean section rate

Presenter name: Ewelina Rzyska

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Cephalic version at Puerta Mar University Hospital

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Introduction

External cephalic version (ECV) is a maneuver that is used to turn a breech in a cephalic presentation. Can also be used to transform a transverse lie in a longitudinal.

Major Scientific Societies and Royal College of Obstetricians and Gyneacologits (RCOG), Spanish Society of Gynecology and Obstetrics (SEGO) and American College of Obstetrics and Gynnecologits (ACOG) recommend the VCE in breech presentation at term.

The aim of our study was to describe the results of the implementation of the protocol ECV in the Hospital Universitario Puerta del Mar of Cádiz.

Materials and Method

The study population was confined to pregnant women with singleton breech presentation without contraindication to be subjected to ECV, in the period between May 2013 and May 2014.
a descriptive, retrospective study was carried out by a review of medical records after one year from the commencement of the offering of external cephalic version in breech presentations.
Success rate, vaginal delivery and factors related to the rate of success of the manoeuver was reviewed.

Results

The manoeuver was offered to 40 women at 32 weeks of gestation, for breech presentation. In 19 of them spontaneous fetal version occurred which was confirmed in the gestational control performed at 35 weeks. Of the remaining 21pregnancypregnant women, who agreed to perform the manoeuver 13, which meant an acceptance rate of 62%. In our Centre the success rate was 53.8%, similar to that reported in other studies (30-70%). For many authors?, the effectiveness of the technique is operator dependent person who carries it out and is directly related to the experience.
In our study, 71% of births were delivered vaginally after a successful VCE, compared with 100% of caesarean section after a failed attempt.

Conclusion

In conclusion, the VCE is a safe and cost-effective procedure provided it is done in a hospital with experienced staff and a specific protocol.
In our study we found that the vaginal delivery occurs at a very high percentage of patients who undergo the technique successfully with excellent perinatal outcomes
However in our population there is a high percentage of rejection by patients candidates perform the technique (38%), in most cases because of fear or lack of it. All this suggests that even a new implementation technique in our Centre would raise the awareness of patients to its advantages
Related learning curve, the patients misinformation, fear of the unknown.

Key words: cephalic versión, breech presentation, vaginal birth
Presenter name: V. Melero Jiménez

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PREGNANCY IN WOMEN WITH LUPUS NEPHRITIS ON HAEMODIALYSIS: A CASE REPORT

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Introduction

Pregnancy in women with renal insufficiency and end-stage renal disease, while uncommon, is definitely possible. The reported frequency of conception among women of childbearing age on dialysis ranges from 0,3 to 1,5 percert per year. Its diagnosis is often difficult since high levels of human beta chorionic gonodotrophic hormone are usually observed in women with end-stage renal disease in the absence of pregnancy.

Renal insufficiency is associated with higher rates of adverse maternal and fetal outcomes. Pregnant women with preexisting renal impairment are significantly more likely to have miscarriage, placental detachment, anaemia, infection, premature rupture of membranes, polyhydramnios, pre-term birth, gestational hypertension, preeclampsia, eclampsia, haemorrhage, need for a caesarean and maternal death.

Materials and Method

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Results

We present the case of a 25 year old woman, gravida 3, para 2, diagnosed with systemic lupus erythematosus (SLE) at age 15. In 2005, she developed an acute nephritic syndrome and a performed kidney biopsy showed WHO Class IV lupus nephritis.

She had a 5 year old son born by cesarean at 38 weeks due to preeclampsia and a 4 year old daughter born by cesarean at 34 weeks for the same reason.

Her renal function had gradually deteriorated and she needed to start conventional haemodialysis (three times per week schedule) on January 2014.

On March 2014, she presented at the nephrology consultation with amenorrhea and a positive pregnancy urine test, and was immediately referenced to our consult (7 weeks gestation).

The patient was counseled about the risks, both to her and foetus, of continuing with the pregnancy and she made an informed decision to proceed with it. She started low dose aspirin for preeclampsia prophylaxis.

Until 28 weeks, the patient received dialysis in a dialysis centre and went through regular controls in a high-risk pregnancy consultation. She did intensive dialysis (five sessions per week) targeting a blood urea nitrogen (BUN) under 50mg/dL, an ideal volemia status and adequate correction of metabolic acidosis and hypocalcemia.

With 28 weeks, the patient was admitted to our hospital with hypertension and thrombocytopenia. She made antenatal corticosteroid for fetal lung maturity. Due to clinical worsening, the pregnancy was interrupted by emergency cesarean section, with the delivery of a 1140 g live female infant with Apgar scores of 7 and 10 at 1 and 5 minutes. The baby was admitted to Neonatal Intensive Care Unit where she remained stable.

Conclusion

SLE predominantly affects women of childbearing age and therefore pregnancy in SLE is of significant concern. Pregnancy in patients with end-stage renal disease is associated with both fetal and maternal adverse outcomes. Monitoring pregnancy in patients on dialysis requires strict multi-disciplinary control.

Key words: PREGNANCY LUPUS NEPHRITIS haemodialysis

Presenter name: Rita Simões Carvalho

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MATERNAL FACTORS INFLUENCING TRANSFUSION OF BLOOD IN OBSTETRICS: AN AUDIT OF PRACTICE

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Introduction

Major obstetric haemorrhage remains one of the top ten causes of maternal death in the UK(1). The Irish Health Service Executive recently revised its guideline on the Prevention and Management of Primary Postpartum Haemorrhage(2). Prediction of patients who may require blood during delivery should enhance patient care while ensuring that products are available when required. Robson has classified pregnancy into 10 groups based on presentation at delivery (3)

The National Maternity Hospital in Dublin Ireland is the largest Maternity Hospital in Europe with over 9,000 deliveries per year. The overall transfusion rate for women is 1.6%

Materials and Method

An audit of blood transfusion practice using data collected from 2007-2014 was conducted to assess the effect of different maternal factors on transfusion rates.

The audit examined the relationship between red cell blood transfusion and:

- Delivery Method and Parity
- Robson Group Classification
- Major Blood Loss and Presenting Haemoglobin

Results

Less than 2% of women receive a blood transfusion.

Delivery and Parity studies examined data from over 50,000 deliveries. Transfusion rates vary significantly with delivery onset method p1.5L were reviewed. Transfusion rates vary with blood loss and with presenting haemoglobin observed at delivery. Haemoglobin <11 g/L significantly increases likelihood of transfusion where blood loss is between 1.5 and 2L. P=0.0061(chi square test).

Conclusion

The overall transfusion rate at the National Maternity Hospital remains at 11g/L are less likely to require transfusion where blood loss is <3.5 L

Key words: Transfusion, Robson Groups

Presenter name: M Culliton

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MIDWIVES CONTRIBUTION TO THE MANAGEMENT OF SHOULDER DYSTOCIA

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Introduction

Shoulder dystocia (SD) is an uncommon and unpredictable obstetric emergency.It can cause major maternal and neonatal morbidities and result in a traumatic experience for both parents and staff.It is a leading cause of litigation in obstetrics.Midwives are present for all deliveries and their role is critical to the positive outcome of this obstetric emergency.The importance of regular skills and drills, teamwork, and communication are well known,but recently a standardised timeframe for the events taking place in deliveries complicated by SD was introduced in our delivery ward.

Materials and Method

In 2014 we started to record the delivery of the head in minutes and seconds as routine at all vaginal deliveries.We then allowed one minute to wait for the next contraction and if not delivered at the first attempt of routine axial traction SD was diagnosed and help summoned.At the next contraction at approximately 2 minutes a further attempt at routine axial traction was attempted if appropriate with McRoberts and suprapubic pressure.If delivery was not successful at the 2nd contraction then internal rotation or delivery of the posterior arm was performed within the 2nd – 4th minute.Although this describes a standard time line,variations in timing of contractions allowed up to 5 minutes for delivery of the head.

Results

In 2014 there were 59 reported cases of SD among 6,968 vaginal births in the National Maternity Hospital.Labour and delivery details recorded included mode of delivery, time of delivery of the head, restituted position of the head at delivery, time of manoeuvres, time of delivery.Detailed maternal and neonatal outcomes were also recorded. All 59 cases of SD had the time of delivery of the head recorded in mins and secs and each manoeuvre was recorded in mins and secs in 57/59 cases.The mean time of head to body interval was 2 min 42 sec with longest interval 5min 24s. 59% of the deliveries were achieved with Mc Roberts and suprapubic pressure and 20% of deliveries were achieved by delivery of the posterior arm.58 /59 deliveries had a completed standardised documentation form in the chart, which detailed the times of delivery of the head and body and the manoeuvres in minutes and seconds. 30/59 of the restituted heads were in the ROA position. 8/59 babies were admitted to SCBU; 10/59 mothers had a PPH and 2/59 had 3rd degree tear.

Conclusion

The midwife's role is crucial in the coordination, anticipation and management of SD.Their ability to calmly lead a team that has practiced this emergency in a multidisciplinary skills and drills session is enhanced by having a standardised timeline known to all.The recording of the time of delivery of the head in minutes and seconds as routine for all vaginal deliveries in our unit has made a critical contribution to the commencing that timeline in the management of cases subsequently complicated by SD.Timing is crucial as it influences what you do and when you do it.A timeline of 4 minutes to guide the head to body delivery interval avoids injuries caused by panic and yet keeps all the clinicians focused on working through the manoeuvres in a timely way.It is particularly useful when a senior clinician joins the team assisting them to select the most appropriate manoeuvres within the given timeline and finallyalso leads to improved documentation.

Key words: shoulder dystocia, standardised timeline, midwife
Presenter name: Gillian Canty

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INTERMITTENT AUSCULTATION: IS THE PINARD DEAD?

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Introduction

In the UK, the most recent NICE guidelines reiterated the recommendation that intermittent auscultation (IA) should be used as the primary method of fetal heart auscultation in low risk women. NICE guidelines recommend that either a Sonicaid (hand held Doppler) or a Pinard stethoscope is used to auscultate the fetal heart. However, the UK Royal College of Midwives (RCM) recommend that a Pinard or other fetal stethoscope should be used at the initial assessment to establish the true sounds of the fetal heart and to aid confirmation of presentation and position.

The aim of our study was to establish if national guidelines for intermittent auscultation of the fetal heart rate in labour were being adhered to, and to establish the views and preferences of healthcare professionals performing IA.

Materials and Method

Our hospital is based in Hampstead, north London. The delivery rate is around 3000 per year and women who are low risk can choose to deliver in an on-site midwife-led birth unit.

Over six months, a random sample of 22 women was retrospectively reviewed, in whom intermittent auscultation was the primary mode of fetal heart monitoring. An anonymous questionnaire was also completed by ten midwives who frequently use IA.

Results

There was a very high rate of compliance with guidelines regarding the timing of auscultation; 94% of women had IA for one minute following a contraction every 15 minutes in the first stage of labour and 85% of women had IA for one minute following a contraction every 5 minutes in the second stage of labour.

The type of equipment used for IA was as follows: 95% of cases were auscultated using a hand-held Doppler, 5% using a CTG probe intermittently and none used the Pinard fetal stethoscope. No cases of IA had first been auscultated with the Pinard before moving to hand-held doppler, as the RCM guidelines recommends.

The questionnaire responses confirmed these findings. Nine out of 10 midwives surveyed reported feeling confident providing IA rather than continuous CTG monitoring in labour, but none of the midwives said the Pinard stethoscope was their preferred equipment for monitoring. Only 6 out of 10 (60%) of midwives providing IA reported feeling confident in using the Pinard fetal stethoscope, and none of the ten midwives surveyed reported that they regularly auscultate the fetal heart with the Pinard stethoscope first, before using the hand-held Doppler.

Reasons given for not using the Pinard stethoscope were awkwardness of use, particularly when the mother is in water or non-lithotomy position (6 responses), inability for the mother to also hear the fetal heart beat (5 responses), lack of availability of equipment (1 response) and lack of confidence/ familiarity with the Pinard (1 response).

Conclusion

From both our study, it would seem that the use of the fetal stethoscope is reducing in popularity. Our study only evaluates one unit within the UK, so it may not be that these findings are generalizable to other parts of Europe, or even other parts of the UK. The Pinard stethoscope may also continue to be of use in low-resource settings, and at times when electronic hand-held Dopplers are unavailable.

Key words: Intermittent auscultation, Pinard stethoscope

Presenter name: Adalina Sacco

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EFFECTS OF A POLICY OF CESAREAN SECTION REDUCTION ON MATERNAL MORBIDITY AND MORTALITY IN A TERTIARY REFERRAL CENTER

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Introduction

In recent years, there has been a rapid increase in the rate of cesarean births in developed countries without evidence of concomitant decrease in maternal or neonatal morbidity or mortality.
Therefore, we are now under a policy of cesarean section reduction in order to prevent its overuse.
The objective of this study was to compare maternal morbidity and mortality in a tertiary referral center before and after the institution of such a policy. We hypothesized that the attempt to reduce caesarean sections did not increase poor maternal outcomes.

Materials and Method

We chose the following adverse maternal outcomes: third or fourth-degree perineal laceration, uterine rupture, postpartum hemorrhage and maternal death. The medical records of all women diagnosed with those outcomes in our institution between January 2013 and December 2014 were retrospectively reviewed. Comparison was made between 2013 and 2014, respectively the era before and after the policy of cesarean section reduction.

Results

In 2013, there were 2875 births in our institution, with a cesarean delivery rate of 36.77%. 71 women had a poor maternal outcome (2.47%); 1 woman died, 14 had third or fourth-degree perineal laceration, 3 had uterine rupture (all with previous cesarean section) and 53 had postpartum hemorrhage. The mean maternal age of these women was 31 years, most were healthy primiparas with so far low risk pregnancies and mean gestational age at delivery was 39 weeks.
In 2014, there were 2778 deliveries, with a cesarean delivery rate of 29.88%. 71 women had a poor maternal outcome (2.56%); 12 women had third or fourth-degree perineal laceration, 3 had uterine rupture, 56 women had postpartum hemorrhage and no one died. The mean maternal age of these women was 31 years and mean gestational age at delivery was 39 weeks.
The groups did not differ in the incidence of adverse maternal outcomes.

Conclusion

The policy of cesarean section reduction applied in our institution has not had a negative impact on maternal outcome.

Key words: cesarean section rate, maternal morbidity, maternal mortality

Presenter name: Ana Galvão

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PREGNANY AND ITS OUTCOME ACCORDING TO MATERNAL AGE

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Introduction

Maternal age is one of the factors considered to evaluate gestational risk. Adolescents appear to be at increased risk for adverse pregnancy and perinatal outcomes, which may be linked with biological immaturity and sociodemographic factors. On the other hand, we have been assisting to a postponement of motherhood in developed countries, which implies a greater risk of chronic comorbidities that might complicate pregnancy. Besides, these pregnancies have been associated to gestational diabetes, preeclampsia, and cesarean delivery. The aim of this work is to characterize complications potentially related to maternal age.

Materials and Method

This is a retrospective study, based on medical records of 538 pregnant women, whose delivery occurred between July and October 2013, in Setúbal's Hospital (SH). The sample was grouped in three categories according to maternal age (Group 1 (G1) ≤ 18 years (n=18); G2 19-34 years (n=405) and G3 ≥ 35 years (n=115). Variables analyzed were pregnancy surveillance (adequate if ≥ 6 appointments), presence of previous diseases, obstetric pathology, gestational age, cesarean delivery rate, birth weight and neonatal complications.

Results

Compliance to prenatal visits was high in all groups (72.2% vs 78.2% vs 79.1%, G1 vs G2 vs G3, respectively). G3 showed the highest rate of pathological history (16.7% vs 16.3% vs 20.0%), gestational diabetes (5.6% vs 3.7% vs 7.8%) and hypertensive disorders during pregnancy (5.6% vs 3.5% vs 7.8%). There was a greater rate of preterm deliveries (16.7% vs 4.4% vs 7.8%), cesarean delivery (33.3% vs 18.2% vs 27.0%) and newborns with low birth weight (LBW, <2500g) (16.7% vs 4.2% vs 5.2%) in G1. The higher rate of neonatal complications (16.7% vs 21.7% vs 25.2%) was reported in G3.

Conclusion

In this sample, maternal age extremes demonstrated higher cesarean rates. Prematurity and LBW were more common in adolescents, while women with older age had higher rate of gestational diabetes, hypertensive disorders and neonatal complications. The results indicate that individual surveillance adjusted to pregnant's age and its common risk factors may have a better outcome.

Key words: Maternal age; Adolescence; Pregnancy complications; Cesarean delivery; Birth weight; Gestational diabetes; Hypertensive disorders; Preterm delivery

Presenter name: Margarida da Silva Cunha

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BIRTH CANAL INJURIES: ARE WE UNDERREPORTING?

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Introduction

Birth canal injuries (BCI) can be iatrogenic (episiotomy) and/ or spontaneous (perineal lacerations, PL). They are associated with high morbidity, in particular obstetric anal sphincter injuries (OASIS). Indeed, PL of third and fourth degrees (OASIS) are identified following 4% of all vaginal deliveries and represent a potentially modifiable risk factor for developing fecal incontinence after vaginal deliveries. However, up to a third are classified as occult.

In what concerns to episiotomy, changes in obstetrical practice have influenced the decision to perform it, which resulted in the decrease of its prevalence. Current evidence supports the performance of episiotomy only in selected cases, depending on clinical situation.

The aim of this work is to describe BCI occurred in a sample of women in Setúbal's Hospital.

Materials and Method

This is a retrospective study based on medical records of 427 pregnant women whose vaginal deliveries occurred between July and October 2013 in Setúbal's Hospital. We describe BCI's presence and type. In addition, risk factors for BCI, such as nulliparity, macrossomy (newborn weight >4000g), instrumental delivery (ID), epidural or spinal anesthesia (ESA) were analyzed in women with BCI (n=355). Finally, we will also evaluate perineal suture's complications.

Results

Episiotomy was performed in 33.8% of parturients. In women with PL (n=211), 31.2% were first degree; 17.6% second degree and 0.7% third degree. No fourth PL was reported. 72 women (16.9%) had an intact perineum.

In women with BCI, 51.0% were nulliparous; 71.9% had ESA and ID occurred in 16.9%; 3.7% of newborns were macrossomic. Episiotomies were 97% of all reported ID's BCI. There were 6 cases of perineal suture complications (2 cases of dehiscence, 1 of infection and 3 of hematoma).

Conclusion

In this sample, analyzed risk factors for BCI demonstrated a high frequency, with the exception of ID, and there was low complication rate of perineal suture.

The reported rate of OASIS was lower than that described in literature, where it is mentioned that OASIS real rate is often higher than reported and many designated as 'occult' might be identified with an accurate physical examination. Its report should be seen as a marker of quality of institutions, since a higher detection rate is associated with greater training/ experience. Not even an intact perineum means absence of PL; so rectal examination should be carried out systematically.

Key words: Birth canal injuries; Episiotomy; Perineal lacerations; Obstetric anal sphincter injuries

Presenter name: Margarida da Silva Cunha

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Sexual Transmitted Disease: syphilis and pregnancy

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Introduction

Syphilis is rare in developed countries, being more prevalent in adolescents with other STDs and an inadequate prenatal care.

Due to the ability of fetal transplacental transmission and vertical, this infection can cause birth defects at the level of the digestive tract, liver and spleen and fetal hydrops, with a consequent increase in poor perinatal outcome in this group of patients.

The main treatment of this disease is penicillin, only a dose of 2.4 million units be necessary to prevent fetal infection in 98% of cases

Materials and Method

We reviewed the literature on the subject, to check the influence of delivery without macroscopic vaginal lesion and the antibiotic prophylaxis to prevent fetal transplacental transmission.

Results

24 years old pregnant woman at 11 weeks negative serology for ETS suspected syphilis by her husband after being studied for non-ulcerated lesion on the glans and inguinal adenopathy, compatible with active syphylis. Maternal seroconversion during pregnancy ocurrs at 30 weeks of gestation, has tested positive for TPHA and RPR, compatible with active syphilis this confirms latent syphilis, which is treated with benzathine penicillin B. Pregnancy is controlled in our Fetal Medicine Unit, without observing significant findings. The patient consultation at week 40 new risk sex, so new dose of penicillin is given.

Pregnancy has gone without symptoms, and no ultrasonographic fetal abnormalities are observed.

Spontaneous onset of labor by premature rupture of membranes at 40 + 4 weeks of gestation. Finally vaginal assisted delivery is produced with healthy newborn.

Neonatology value and penicillin G is administered in the first minutes of life as prevention of congenital syphilis. The next day reaginic serology is done: negative RPR, TPHA (hemagglutination) 1: 160, which does not receive further treatment.

Physiological puerperium.

Conclusion

It is important to detect the disease from first symptoms or following a suspected sex to administer treatment as soon as possible, and keep a close maternal and fetal surveillance. Since the transmission is vertical and transplacental route of delivery is vaginal. Finally, the neonatologist should assess the newborn to rule out possible complications, perform serology and administer the appropriate treatment.

Key words: Syphilis, pregnancy, outcome

Presenter name: V. Melero Jiménez

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MECONIUM ASPIRATION SINDROME AND OBSTETRICS RISK FACTORS

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Introduction

The pathophysiology of meconium aspiration síndrome (MAS) is not completely understood. Several common antepartum or intrapartum risk factors, as well as neonatal factors, have been reported to be associated with the development of MAS in neonates.

The aim of the study was to analyze the MAS cases at Virgen de la Nieves University Hospital in Granada(Spain) and their associated risk factors,between 2010–2014.

Materials and Method

We identified 32 cases of SAM. Risk factors were divided in maternal variables (age, parity, smoking, gestational age at delivery, body mass index); variables associated with labor (onset of labor number of hours since the bag was broken, intrapartum fever, fetal heart rate anomalies,mode of delivery and characteristics of amniotic fluid) and neonatal variables (sex, weight, Apgar score, cord pH, presence of base excess at birth and neonatal ICU admission and duration)

Results

Maternal variables: 23.3% were over 35 years, 6.7% of pregnant women were smoker and 70% were nulliparous.

The average gestational age was 39.5±1,8weeks of gestation (28.2% exceeded 41 weeks). 25% were overweight and 15% obese.

Labor factors: 43.3%had their labor induced; the most frequent cause of induction was non-reassuring FHR(20%), followed by meconium-stained amniotic-fluid(6.7%).The average time of broken bag was 6.5h. There were 5 cases of intrapartum fever (16.6%). There were 40%of cases with meconium-stained amniotic fluid at the time the bag was broken and this number increased to 90% at the end of the labor.

Amnioinfusion was more used when meconium was thick(66,6%)p=0,07

Alterations in FHR were present in 22 cases (73.3%): variable decelerations (57,6%)were the most frecuent ones.

According to the mode of delivery,56.7% finished by emergency caesarean section.All vaginal births, 61.5% were spontaneous. Non-reassuring FHR was the cause of operative delivery or caesarean section in 56,7% of cases

Neonatal factors:6.7% were underweight babies.There was a low Apgar score at 1 and 5minutes (30 and 60% respectively)

The study of umbilical pH showed: arterial pH<7.20(71.4%); venous pH<7.20(48.3%). 20.7% of cases had base deficit<-12mEq/l.

Amnioinfusion was used in 8cases(26.7%). There were statistically significant differences observed when we studied its relation with neonatal outcome: low Apgar score at 1minute in 55.6%of cases in which amnioinfusion was used; pH<7.20(100%) and need for advanced neonatal resuscitation(66.6%).

53.3% of babies were admitted to the neonatal ICU, with an average time of stay of 5.8±7.3 days

Conclusion

The identification of risk factors is important.

Amnioinfusion was more used in case of thick meconium.This latter variable was associated with worse neonatal outcome.

Recent studies suggest a different pathophysiology of severe MAS, with a possible beginning in utero,before labor. To get an early detection of fetuses with increased risk of developing a MAS and a prediction of disease severity is necessary to develop clinical strategies.

Key words: MECONIUM ASPIRATION SINDROME, RISK FACTORS

Presenter name: L. Revelles

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Vaginal birth delivery in pregnant women with emergency urinary incontinence

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Introduction

Gestante 37 + 6 weeks of severe urgency urinary incontinence (G4A3, History of antiphospholipid syndrome treated with Clexane 60 or day) to whom he was placed a pessary to control urinary incontinence

Materials and Method

Literature review and presentation of clinical case of Gestante 37 + 6 with urinary incontinence emergency.

Results

Spontaneous onset of labor after pessary removal, at 37 + 6 weeks of pregnancy, newborn sex woman, Weight: 2320 g APGAR 9/10 that is delivered to neonatologist

The patient is currently completing the urodynamic urinary incontinence study prior to the assessment of surgical treatment because it has completed its procreative desire.

Conclusion

The use of the pessary as symptomatic control urinary incontinence during pregnancy can be an effective alternative for women who experience worsening of their incontinence, uterine prolapse or cystocele during pregnancy.

Via elective cesarean delivery as there seems to be effective in preventing clinical worsening after birth also not contraindicated vaginal delivery.

Key words: vaginal delivery, urinary stress incontinence

Presenter name: V. Melero Jiménez

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INFLUENCE OF CONTINUOUS SUPPORT IN LABOUR ON PERINATAL OUTCOME

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Introduction

In the recent years, a continuous support in labour has become widely accepted as a response to dehumanization in maternity wards. Effects of continuous intrapartal support compared to the usual care are well documented by different authors. Most of the results revealed that women who received continuous labour support were less likely to experience analgesia or anesthesia, instrumental delivery or caesarean section. In addition, their labour was shorter.

In Croatia, a continuous labour support has become available in most maternity wards only recently. Department of Gynecology and Obstetrics of the Clinical Hospital Centre in Rijeka was among the first in Croatia which has routinely allowed that kind of support from 2002.

Materials and Method

This study analyses the influence of continuous labour support on perinatal outcome in the Department of Gynecology and Obstetrics of the Clinical Hospital Centre in Rijeka, Croatia, in a five year period. Planned caesarean sections were excluded. Different data were analyzed including: induction of labour rate, intrapartal analgesia, oxytocin stimulation, mode of delivery, duration of labour, episiotomy incidence, Apgar score and influence on breastfeeding.

Results

Between January 1, 2009 and December 31, 2013, 15232 deliveries were analyzed. Continuous support in labour was provided in 49.9% of cases, mostly by a woman's partner, and occasionally by some other family member or a friend. Other specially trained and experienced persons providing labour support are not commonly present during labour in Croatia. Labours with continuous support were characterized with a more spontaneous vaginal birth, but also more oxytocin stimulation, and analgesia in labour, a higher incidence of episiotomy and a longer duration.

Conclusion

Presented results do not coincide completely with the data published by other authors. The fact that continuous support in labour in our hospital was connected with more stimulation in labour, more analgesia, a higher incidence of episiotomy and a longer duration of labour can only partially be explained with the fact that the women with continuous support in labour were in majority nulliparous. The other possible explanation is that support in labour was, in the vast majority of cases, provided by partners, other family members or friends who were not trained and educated for the labour support.

Key words: labour support, perinatal outcome
Presenter name: Aleks Finderle

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Placental acretisim and surgical treatment: a case study.

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Introduction

Placental acretisim occurs when there is an abnormal implantation of the placenta; the corial villi invade the myometrium in the implantation site. This increases the risk of massive hemorrhage, possible alterations in coagulation, and damage to other organs or even death.

Here we present a case study of a 33-week pregnant women who is accepted into the emergency room with metrorragia more abundant tan a regular menstruation.

Materials and Method

33-week pregnant women with prior cesarean section within the last 18 months. Current pregnancy was well controlled and had a diagnosis of total occlusive placenta previa and there was a suspicion of placental acretisim.

The patients is accepted into the emergency room at 33 weeks pregnancy with a metrorragia more abundant tan a regular menstruation; these symptoms lead to a cesarean section and possible risk of hysterectomy. An urgent cesearn was performed with the birth of a female fetus, 2100g and APGAR 5-8-9. After manual extraction of placental, acretisim is confirmed and a hysterectomy is performed due to uncontrolled hemorrhage.

Results

After the intervention the patient presents with hemodynamic instability and is taken to intensive care, she is kept there for 5 days. After this time the patient is taken to a room and has a favorable evolution.

Conclusion

In women with a suspicion of placental acretism the objective for the surgical team should be to perform a cesarean section and hysterectomy with the minimum hemorrhage possible. There are on-going studies that examine the conservative management of placental acretisim, however, the main treatment option right now is still total hysterectomy.

Key words: acretisim treatment

Presenter name: A. Gallardo

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Discovery during childbirth: aneurism of umbilical vein a case study.

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Introduction

37 year old pregnant women, bearing second child, with no outstanding OBGYN history. Screening results for Down and Edward disease were 'low risk'.
In a routine visit at week 32 a small left posterior ventriculomegalia was observed (11mm).
In a subsequent visit at week 34.5, a suspicious focal expansion in the umbilical vein was observed. The expansion had pulsating flow.

Materials and Method

Woman was accepted into The Hospital de Poniente de Almeria at 41 weeks gestation for pre-induction due to an over-due pregnancy.
Instrumental childbirth was performed to help in the final phases of the delivery. Male fetus was born, weighing 2700g, with APGAR of 9 at 1 min and APGAR of 10 at 5 min.

Results

The umbilical vein aneurism is a rare alteration, which in a 30% of the cases can be associated to chromosomic anomalies, cardiac anomalies, fetal anaemia or hidrops. Due to its severity the majorityof the cases are diagnosed during the postpartum exam of deceased fetuses.
Normally the aneurisms occur in the intra-adbominal portion of the umbilical vein, withhigh risk of thrombosis; if it occurs in the intra-amniotic portion of the umbilical vein, there is risk of breakage that may result in intra-amniotic hemorragia with exangionacion, thrombosis and fetal death.

Conclusion

The prenatal diagnosis can be suspected when a focal dilation is observed during echography and can be confirmedusing a Doppler, which can show the presence of pulsating flow within the mass. A differential diagnosis should be done, rejecting the possibility of the presence of umbilical vein cysts, both pseudo cysts and true cysts.
If the diagnosis is made when the fetus is mature, the pregnancy must be terminated. If the fetus is still immature then position tests should be done weekly until the fetus is mature, at this time the delivery should be induced.

Key words: aneurism umbilical vein
Presenter name: A. Gallardo

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CHARACTERISTICS OF INSTRUMENTAL CHILDBIRTHS: OUR EXPERIENCE AT THE HOSPITAL DE PONIENTE DE ALMERIA (ALMERIA, SPAIN)

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Introduction

We aim to determine the characteristics of instrumental childbirths that finalized with Kielland forceps, Thierry's spatula or through suction pads.

Materials and Method

We performed a descriptive retrospective study of allpregnancies that finalized with an instrumental childbirth in the Hospital de Poniente of Almeria (Almeria, Spain) during the last trimester of 2013. We analyzed the following variables: type of aminorrexis, number of hours since water break, use of analgesic epidural, performance of episiotomy intervention, instrumentalization indication and type of tear.

Results

From a total of 98 instrumental childbirths that were registered during this time period, half of the cases had spontaneous aminiorrexis (58.16%). The mean time since water break was 14 hours and 22 minutes. 75.51% of the cases opted to use the analgesic epidural. 76.53% of the cases had a right lateral epistemic intervention. Instrumentalization indication occurred in an 80.61% of the cases to aid in last phases of delivery and in a 19.38% of the cases due to avoid issues with the fetus's health. In a 67.34% of the cases there was no tear, in a 12.24% there was type I tear, in a 17.34% there was type II tears and in a 3.04% the tears were type III.

Conclusion

The characteristics of instrumental childbirths that we observe in the Hospital de Poniente de Almeria (Almeria, Spain) are spontaneous amniorrexis, use of analgesic epidural and right lateral epistomic intervention. The principal reason to perform an instrumental delivery is to aid in the final phases of the delivery and in the majority of the cases there is not type of tear.

Key words: INSTRUMENTAL CHILDBIRTHS
Presenter name: A. Gallardo

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Anal sphincter tear repair: short term and intermediate term outcomes

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Introduction

There is a causal relationship between anal sphincter tear and incidence of anal incontinence (AI). A high percentage of women present with AI after childbirth. The objective of this study is to evaluate the short term and intermediate term outcomes after repair of grade III and grade IV tears during childbirth.

Materials and Method

We conducted a prospective cohort study of 22 cases of sphincter lesions that occurred during 2013 in the Hospital de Poniente (El Ejido, Almeria, Spain). All cases were repaired during childbirth through terminal suture and the SEGO protocol was applied: 2 gr of Mefoxitin before the repair and 5 days on amoxicilin and metronidazol a diet rich in fiber and lactulose for 2 weeks. All patients were scheduled for follow-up visit with the pelvic specialist 6 weeks and 6 months post partum.

Results

A 72.2% of the repairs were III-B, 18.8% were III-A and 4.5% were III-C and there were no cases of grade IV. OF the patients that attended their follow-up visits at 6 weeks (83.36%), 63.15% were asymptomatic, 15.78% presented with dyspareunia, 10.52% presented with pain when defecating and a 5.26% only had AI with gas. AT the 6-month follow up visit an 88.8% of patients were asymptomatic and only 11.1% presented with dyspareunia, no patients presented with AI.

Conclusion

The correct diagnosis and treatment of the sphincter anal lesions during childbirth and the application of the correct protocols with antibiotic and laxatives is essential to decrease the incidence of AI and associated symptoms.

Key words: Anal sphincter tear repair
Presenter name: A. Gallardo

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External cephalic version: our experience at Hospital de Poniente de Almeria

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Introduction

External cephalic version (ECV) is a valid maneuver instead of elective cesarean sections when the fetus is in complete breech presentation. In our study we quantified the impact of the use of the ECV maneuver in the decrease of number of cesarean section due to complete breech presentation.

Materials and Method

We preformed a retrospective study of cesarean sections and ECV during 2013 in el Hospital de Poniente de Almeria.

Therewere a total of 555 cesareans sections perfumed, of which 102 (18.2%) were eligible for EVC due to with complete breech presentation. In the same period 22 ECV maneuvers were performed, of which 12 (54.4%) were successful and 10 (45.4%) failed.

We established minimum criteria for inclusion for the performance of the ECV during week 37 and we used ritodrine as an uteroinhibitor. We decided to not use any type of analgesic. There were no complications derived from this maneuver in any of the cases.

Results

Of all the cesarean sections that occurred in 2013, 18.3% were due to complete breech presentation. If ECV had not been done, our incidence of caesarian section would have increased a 2.24% and would have presented at 20.54%

Conclusion

The ECV maneuver is an accepted, safe and cheap procedure. It is a good technique to reduce the number of cesareans performed in cases where there is complete breech presentation without increasing the risk of complications.

Key words: external cephalic version
Presenter name: A. Gallardo

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Abdominal cerclage case report

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Introduction

Abdominal cerclage is indicated when vaginal cerclage is failed two or more times.
It can be performed before pregnancy or between 11 to 14 weeks of pregnancy.
Elective cesarean section between 37-39 weeks by hysterectomy incision above cerclage is performed and it is not necessary removed it if the woman want another pregnancy.
The failure removal of cerclage has been associated with increased vaginal infections and vaginal mesh extrusion.

Materials and Method

We conducted literature review to assess the termination of pregnancy in patients with misshapen uterus, full resection uterine septum, carrier abdominal cerclage because poor obstetrical history. (Early abortion, death in utero to term, abortion 17semanas)

Results

Preterm onset labor at 33 weeks of pregnancy, achieving adequate tocolysis to 34 weeks of pregnancy, moment in which uterine distension was observed, funneling zone at cerclage level insertion, however slight polyhydramnios. Due to the mechanical factor that determines the onset of uterine dynamic cesarea is decided because inadequate tocolysis and risk of uterine rupture hiperdistensión on misshapen uterus

Conclusion

The abdominal cerclage is a resource rescue pregnant where it has failed vaginal cerclage in cases of cervical insufficiency.
We perform an individualized pregnancy control according to personal risk factors

Key words: cerclage, poor obstetric outcome
Presenter name: V. Melero Jiménez

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Maternal and neonatal morbidity in cases with placenta praevia whose length between placental edge and internal os was 0-20 mm depending on the mode of delivery.

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Introduction

Mode of delivery in cases of placenta praevia inserted between 0 and 20 mm of the internal cervical os is still debated. The aim of this study is to compare maternal and neonatal morbidity depending on mode of delivery.

Materials and Method

This retrospective and multicentric study included all pregnancies with a diagnostic of placenta praevia, with a distance between the lower placental edge and the internal cervical os ≤ 2cm. Two hundred and sixty seven patients were included between the 1st January 2007 and the 31th December 2012, and were dispatched in two groups: vaginal delivery attempt group or planned cesarean section group. The primary endpoint was postpartum hemorrhage. Maternal and neonatal complications were compared depending on the mode of delivery.

Results

Rates of postpartum hemorrhages were similar in the 2 groups : 33,8% (24/74) in the vaginal delivery attempt group versus 36,8% (71/193) in the planned cesarean section group (p = 0,61). No significant difference was found in terms of maternal morbidity. We found an increase in neonatal morbidity in the planned cesarean section group, with an increase in rate of preterm deliveries (59,1% vs 35,1%, p< 0,001), rate of birth weights < 2500g (43,5% vs 24%, p = 0,002) and rate of transferts in neonatal intensive care unit (48% vs 20,8%, p< 0,001). When placenta was inserted at 10 mm or less of the internal cervical os, risk of postpartum hemorrhages and severe postpartum hemorrhages were similar in the two groups, but neonatal morbidity was increased in the planned cesarean section group.

Conclusion

Risk of postpartum hemorrhages was not increased by vaginal delivery attempt when placenta was inserted between 0 and 20 mm of the internal cervical os.

Key words: placenta praevia, postpartum hemorrhage, cesarean, internal cervical os, vaginal delivery
Presenter name: Pauline Jeanneteau

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Evaluation of Maternal Satisfaction with Maternity Services in The City Center of Aydin

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Introduction

This research has been done for women giving birth in the birth and level of satisfaction from services received by admitted pregnant women in early postpartum period before being discharged from hospital and this study has been done for descriptive study to determine the factors that influence maternal satisfaction and it is a cross sectional study and descriptive study.

Materials and Method

This study was carried out on between December 2012 - February 2013 in Adnan Menderes University Application and Research Hospital, a private hospital and Aydin Obstetrics and Pediatric Disease Hospital. Researchs sample method has been taken a total of 376 healthy mothers who gave birth. In selection of samples has been based on two criteria, first criteria is type of hospital (public, universities, private) and second criteria is based on to the figures of births (spantenous vaginal delivery and ceserean delivery) and for this research was used straified sampling method.

In the collection of data has been used a questionnaire which includes questions about the demographic characteristics of the mothers pregnancy and with about childbirth descriptive characteristics, “The Scales for Measuring Maternal Satisfaction in Normal and Cesarean Birth” and “The Hospital Anxiety and Depression Scale”. This forms are filled by taking informed consent of mothers without being discharged.

Results

The obtained data has been analyzed in the SPSS package program. The percentage distribution, the arithmetical average and Ki-square test were used in the analysis of the data. For research is taken mothers who are 54.3% mothers between the ages of 24 and the ages of 30 and 46.5% of mothers has worked and all working mothers have got social security. 54.5% of mothers have made a normal birth and 54.3% of mothers have made primiparus before active birth, receiving prenetual care is 56.4%.

Conclusion

In this study, pregnant mothers who gave birth in private hospital, with a high level of education, with good economic situation, with low risk for anxiety and depression ceserean births, 5 or more antenatal care during pregnancy, participating in prenetal education classes, planned and desired pregnancies and in having a boy baby has been found to be higher levels of satisfaction.

Key words: Birth, Postpartum, Mother, Patient satisfaction

Presenter name: Hulya DEMIRCI

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Maternal and neonatal morbidity of placenta praevia: complete placenta praevia versus low-lying placenta

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Introduction
The aim of this study is to compare maternal and neonatal morbidity between two groups: patients with complete or partial placenta praevia and patients with low-lying placenta, including marginal placenta praevia.

Materials and Method
This study was a retrospective and multicentric study. All patients who delivered after 22 weeks of amenorrhea, between the 1st January 2007 and the 31th December 2012, and who presented a placenta praevia were included.

Results
In our study, prevalence of placenta praevia was 0,5%. Six hundred and fifty one patients were included, whose 314 in Group 1 (complete placenta praevia and partial placenta praevia) and 337 in Group 2 (marginal placenta praevia and low-lying placenta). Rate of antepartum hemorrhages were similar in the two groups. Rates of hospitalisations (85% vs 78%, p = 0,02), ceserean sections (100% vs 78,3%, p < 0,05), preterm deliveries (60,2% vs 48,3%, p = 0,01), general anesthesias (52,2% vs 29,1%, p = 0,01), postpartum hemorrhages (28% vs 19,3%, p = 0,01), transfusions (17,5% vs 9,5%, p = 0,01), hysterectomies (60,2% vs 48,3%, p = 0,01) and postpartum anemia (74,5% vs 67,4%, p = 0,04) were significantly higher in Group 1 versus Group 2. Rate of neonatal transfusions was significantly increased in Group 1 (1,5% vs 0%, p < 0,05).

Conclusion
Maternal and neonatal morbidity was increased in cases of complete or partial placenta praevia, versus marginal placenta praevia or low-lying placenta.

Key words: complete placenta praevia, postpartum hemorrhage, antepartum hemorrhage, pregnancy outcomes, hysterectomy

Presenter name: P. Jeanneteau

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The INDEX trial: Effects of induction of labour at 41 weeks versus expectant management till 42 weeks.

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Introduction

Background:
• Discussion about optimal policy for (impending) post-term pregnancy.
• Default policy in The Netherlands: 42+0 weeks induction of labour.
• Trend towards induction of labour before 42+0 weeks (≥ 41+0 weeks) based on research and public debate.
• But most studies in reviews allowed a policy of expectant management >42 weeks in their control groups and lack a 41-42 week comparison.

Materials and Method

A Multicentre randomised controlled clinical trial with cost-effectiveness analysis.
The study population are low risk women with a singleton pregnancy and a certain gestational age of 40+5 to 41+0 weeks. The intervention is labour induction at 41 weeks, if necessary proceeded by artificial cervical ripening, versus expectant management until 42+0 weeks.
The primary outcome will be a composite of perinatal mortality and neonatal morbidity. Adverse perinatal outcomes are defined as, a 5-minute Apgar-score below 7 and/or an arterial pH below 7.05, meconium aspiration syndrome, plexus brachialis injury, intracranial hemorrhage and/or NICU admission.
Secondary outcomes will be maternal outcomes: instrumental vaginal delivery, Caesarean section, pain treatment (epidural, remifentanyl, pethidin), postpartum hemorrhage (>1L) and severe perineal injury (third- or fourth-degree perineal tear). Other outcomes are maternal experience of pain, maternal satisfaction and quality of life, client preferences for induction of labour or expectant management, and the extent to which these preferences are influenced by the attributes of obstetric care and socio-demographic factors.
Sample size was calculated for non-inferiority testing. Therefore, when the sample size in each group is 900, the power of this study has been calculated on 1800 patients.
We will collect data alongside the trial to estimate the costs and cost-effectiveness of immediate delivery and expectant management from the societal perspective.

Results

Questions about the trial: index@studies-obsgyn.nl. Follow us on twitter @indexstudie.
Results are expect in mid-2016.

Conclusion

In literature elective induction of labour ≥ 41 weeks in comparison to expectant management (≥ 42 weeks) is associated with:
• A lower risk for perinatal mortality (1/3315 vs 11/3282: RR 0.31; 95% BI: 0.11-0.88; NNT 368), but no lower risk for stillbirth (0/3315 vs. 5/3282 RR= 0.29; 95% CI: 0.06-1.38). (Systematic review (SR) Hussain et al. BMC Public Health nov 2011)
• A lower risk for MAS: 14/1114 vs 33/1107: RR 0.43; 95% BI 0.23-0.79 (SR Hussain et al.).
• A lower risk for an emergency Caesarean section 658/3318 vs 750/3299: RR 0.87; 95% BI 0.80-0.96 (SR Wennerholm, Acta Obstetricia et Gynecologica. 2009; 88: 617).
• But most studies in reviews allowed a policy of expectant management >42 weeks in their control groups and lack a 41-42 week comparison.
Results of the INDEX trial are expect in mid-2016.

Key words: labour induction, expectant management, late-term, pregnancy, perinatal mortality, perinatal morbidity, maternal mortality, maternal morbidity.
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Uterine rupture during labour: a case report

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Introduction

Uterine rupture is a rare obstetric and surgical emergence, with potentially serious complication, for both the mother and/or the baby.

The most common predisposing factor for uterine rupture is a prior cesarean scar, but other risk factors should be considered.

We hereby present the case of a uterine rupture in a non-scarred uterus, which was surgically resolved with a total abdominal hysterectomy.

Materials and Method

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Results

Mrs C.C. was 29 years old. T1,P1,A1,L1 (1 eutocic delivery, 1 stillbirth at the 32nd week, 1 miscarriage without uterine curettage). Two years before Mrs C.C. underwent conization for treatment of CIN 3.

Mrs C.C. was presented at the hospital with premature rupture of membranes at the 38th week of gestation. The induction of labour was conducted by the hospital protocol (misoprostol 100ug oral and oxytocin perfusion after 6h).

During labour no fetal distress was observed and uterine contractions occurred without open or abnormal contractions.

The progression of the second stage of labour was slow and the delivery was facilitated by the use of Simpson forceps. A boy (2985 g) was born with an APGAR score of 9 and 10 at 1 and 5 minutes after birth, respectively.

The patient had a massive postpartum haemorrhage, which did not respond to aggressive medical treatment neither to instrumental revision of the uterine cavity.

A rapid progression to shock was observed and initial resuscitation procedures began. It was decided to undergo exploratory laparotomy under general anesthesia and it was observed an incomplete uterine rupture (intact peritoneum) on the inferior 1/3 of the uterine left lateral wall. A conservative surgical procedure, involving uterine repair, was attempted without success. B lynch sutures at laparotomy failed to contract the uterus and total hysterectomy was therefore performed.

Post-operative procedures occurred without complications and the patient was discharged from the hospital 7 days after surgery.

Conclusion

Post-partum haemorrhage continues to be a leading cause of maternal morbidity and mortality. Post-partum haemorrhage is rarely caused by uterine rupture although it should still be taken into account as a potential cause. In this case a uterine rupture in an unscarred uterus determined a total hysterectomy and this case emphasizes the need for medical staff to be aware and alert to unusual risk factors for massive obstetric haemorrhage and the need for multidisciplinary planning.

Key words: Uterine rupture, Post-partum haemorrhage, labour

Presenter name: Carlota Lavinas

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Cerebral aneurysm and delivery in pregnancy

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Introduction

Surgery for cerebral aneurysm affecting left posterior cerebral artery, which caused memory loss and loss of vision in both eyes right field, two years before actual pregnancy.

Materials and Method

There is controversy in literature about the complications in pregnancy. Increased risk of aneurysm rupture during the pregnancy (increased with gestational age, increasing to 50% in the third quarter), increased risk during the labour 2%, and during the postpartum 8%.

No protective effect of cesarean section describes as there are reported cases of rupture during cesarean section. We must bear in mind that the surgical risk during the cesarean section because of its pathology is higher than in the general population.

Results

Taking into account the results of the review and offer both options to the patient, is decided jointly perform cesarean after taking over the maternal risks described.

Conclusion

The decision route delivery in unusual cases of maternal disease is often more difficult because of the lower consitencia Back Up scientific literature.

Key words: cerebral aneuryms, rupture during pregnancy, delivery

Presenter name: V. Melero Jiménez

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Preterm delivery in singleton pregnancies – Faro's Hospital experience in 2014

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Introduction

The optimal route of delivery in preterm pregnancy remains controversial and it is uncertain how it will affect the neonatal outcomes. Some studies demonstrated a reduction in intraventicular hemorrhage after vaginal delivery, decreased mortality and respiratory distress. On the other hand, cesarean delivery (CD) increases the likelihood of maternal morbidity and mortality and, apparently, does not improve the outcomes in singleton vertex presentation preterm pregnancies.

Materials and Method

We accomplished a retrospective study, analyzing maternal and neonatal outcomes after vaginal birth (VB) or CD in singleton, vertex presentation preterm (24 – 36 weeks and 6 days) pregnancies, during the year of 2014 at Faro's Hospital.

Stillbirth, breech presentation, fetus with congenital anomalies, growth restricted and instrumented deliveries were excluded.

The analyzed outcomes were maternal complications, 5-minute Apgar score, intraventricular hemorrhage, necrotizing enterocolitis, respiratory distress, need for ventilation support, sepsis and death.

Results

Eighty-seven women and neonates were included in our study. Average maternal age was 31 years old (SD 6), 48% were primiparas. The mean gestational age at delivery was 34 weeks (SD 3), 3,4% were <28 weeks, 10,3% between 28 and 32 weeks, 25,3% between 32 and 35 weeks and 60,9% were ≥ 35 weeks. Forty-eight percent of women were hospitalized for threatened preterm delivery or in labor, 28,7% had preterm ruptured membranes. Other causes for hospitalization were maternal pathology associated with pregnancy, placental abruption, non-reassuring fetal status.

Treatment with steroids for fetal lung maturity was completed in 67,6% of deliveries under 35 weeks.

There were 67% vaginal deliveries. All the deliveries under 28 weeks were vaginal, whereas 66% of deliveries between 28 and 32 weeks were caesareans. The main causes for CD were, in decreasing order, non-reassuring fetal status (8), suspected placental abruption (6), previous uterine scar (5), pre-eclampsia/HELLP (3), feto-pelvic disproportion (2), maternal pathologies and cord prolapse.

Mean newborn weight was 2326g (SD 654g), only 2,3% (2 newborns) had a 5-minute Apgar score < 7. Hospitalization mean duration was 14 days (SD 20). There was only one neonatal death. The main complication was respiratory distress syndrome, which was diagnosed in 16% of the infants. Sepsis occurred in 9% of the newborns, intra-ventricular hemorrhage in 4,6% and necrotizing enterocolitis in 2,3%. Adverse neonatal outcomes were more frequent after CD, except for intraventricular hemorrhage and asphyxia.

The most common maternal complication was anemia. The average hospitalization period was 3 days (SD 1,5).

Conclusion

In our study, neonatal and maternal complications were more frequent after CD, however, this sample is not large enough to ascertain meaningful statistical conclusions. In our opinion, it is worth continuing this retrospective study in order to infer possible correlations within the data.

Key words: Preterm birth, vaginal birth, cesarean delivery

Presenter name: A. Edral

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EXTERNAL CEPHALIC VERSION – COMPLICATION RATES AND FACTORS THAT ARE PREDICTIVE OF SUCCESS

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Introduction

OBJECTIVE: To evaluate the complication rate of external cephalic version (ECV) and factors that are predictive of its success.

Materials and Method

Retrospective study performed in a tertiary care university hospital. All cases of ECV performed by four senior obstetricians in our department between 2002 and January 2015 were evaluated. Tocolysis was used in all nulliparous women and in multiparous women when frequent uterine contractions were detected. A maximum of three attempts were allowed. Success was defined as the ultrasound documentation of a cephalic presentation straight after the procedure. Clinical data were collected from the ObsCare® electronic clinical record program. Anthropometric factors, obstetric history and pregnancy characteristics were assessed.

Results

A total of 217 ECVs were performed, with an overall success rate of 35% (24.6% in nulliparous and 49.4% in multiparous women), 56.6% of which on first attempt ($p<0.001$). In the success group, cephalic presentation at birth was documented in 89.5% of cases, and the overall vaginal delivery rate was 68.5%. The success group had a higher mean maternal age (32.1±5.7 vs. 29.9±5.4, $p=0.007$), lower body mass index (BMI) (27.7±4.5 vs. 29.1±5.3, $p=0.040$), more multiparous women (58.7% vs. 32.1%, $p<0.001$) and more posterior placentas (50% vs 35.5%, $p=0.017$). No differences between groups were found regarding the gestational age at ECV, position of the fetal back, birthweight and amniotic fluid volume. A logistic regression model found BMI <30kg/m2, multiparity, left position of the fetal back (vs. right position) and posterior placenta (vs. anterior placenta) to be independent factors predictive of success. No adverse maternal or fetal effects were reported, with the exception of one case of a fetal heart rate deceleration returning to normal after maternal left lateral decubitus.

Conclusion

The success rate for ECV was lower than that described in many scientific publications, and this could be related to the relative inexperience of the operators. The technique was not associated with any relevant clinical complications. Lower BMI, multiparity, left position of the fetal back and posterior placenta were identified as factors that are predictive of success.

Key words: external cephalic version, success, complications

Presenter name: Cátia Jorge Moreira

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Factors involved in preterm labor - the reality of a tertiary center

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Introduction

There are several factors responsible for preterm labor (PTL), some with substantial risk (multiple gestacion, previous PTL for example), most women that develop a PTL didn't have risk factors. In this group pregnant woman, clinical modifications and / or ultrasound of the cervix can be able to predict a preterm labor, even when not associated with other parameters (fetal fibronectin for example). Our aim is to analyze factors that may predict the risk of a PTL in symptomatic (contractility, PPRM, menorrhagia, leucorrhoea) women.

Materials and Method

Observational retrospective single-centre cohort study including 153 pregnant women consecutively admitted to our hospital (2011-2013) for threat preterm labor (TPL). We had two groups (A and B): Group A (n = 58), with a admission for TPL and had a PTL. Group B (n = 95), pregnant admitted for TPL but deliver at term. Twins pregnancies and gestations under 24 weeks at admission were excluded. The SPSS 20.0 program was used statistics analysis.

Results

The average maternal age was 31.01 vs 29.9 years (A vs B), pNS. Antecedent of a PTL were not different between the groups (10.3% vs. 6.3%, PNs). Only 37.9% (n = 58) had PTL. In patients with uterine contractility, lower cervical length (24-35 weeks) represents greater risk of a PTL (ROC curve: AUC 0,705; p = 0,004), with an average of 22mm cervical length. The percentiles of cervical length for our population had P10, P25, P50, P75, P95 were respectively 12,50; 16,0; 22,0; 27,0 and 38,75 mm. The mean cervical length at 24-27 + weeks was 19,67±7,6 (sensitivity (S) 50% , specificity (SP) 70%) vs 22,13±7,5 mm (A vs B), pNS; The mean cervical length at 28-31 + weeks was 18,63±8,2 (S 50% , SP 80%) vs 24,04±6,0 mm (A vs B), p = 0.01; The mean cervical length at 32-34 + weeks was 17,5±6,3 (S 40%, SP 84%) vs 25,5±8,8 mm (A vs B), p = 0.01. Clinically dilated cervix (1-3cm dilated) at the time of admission was more frequent in group A (46,6% vs 25,2%; OR 2.9, 95% CI 1.43 to 6.08), p = 0.003. The use of tocolysis had no significant difference the two groups (55.2% vs. 61.1%, pNS).

Conclusion

Considering a symptomatic population, we found that the mean cervix length (19,67; 18,63; 17,5 mm) had a low sensitivity, but high specificity (70-84%, adjusting the gestational age) being possible tool for the diagnosis of preterm labor. This study was limited by the sample size and for being a retrospective study.

Key words: preterm labor, cervical length

Presenter name: Fabiane Neves

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The impact of a national cardiotocography education program; interpretation skills and the association to size of maternity unit and years of obstetric experience

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Introduction

To reduce the incidence of hypoxic injuries among newborns a national obstetric intervention was initiated in 2012. As part of the intervention all physicians and midwives working at a Danish maternity unit participated in a mandatory standardised cardiotocography (CTG) education program.

We aimed to measure the effect of the education program on CTG interpretation skills and to explore a possible association to years of obstetric experience and size of maternity unit.

Materials and Method

All participants attended a seven-hour CTG course, consisting of both classroom teaching and small group teaching. The course addressed foetal physiology, CTG interpretation and clinical management. At the beginning of the course each participant answered 10 out of 30 questions of a CTG multiple choice question test (pre-test). At the end of the course participants answered all 30 questions in the test (post-test). The test emphasized CTG interpretation and clinical management. Information on workplace and clinical obstetric experience were obtained during the course.

Results

(Preliminary results) A total of 53 CTG courses were conducted and 1679 physicians and midwives from 24 maternity units consented to participate in the study. Comparing responses to the 10 questions before and after the CTG course showed a significant improvement in numbers of correct answers (diff. 0.66, p<0.001). Participants from large maternity units (>3000 deliveries/year) had significantly more correct answers than participants from small maternity units (<1000 deliveries/year) and participants with less than 15 years of obstetric experience had significantly more correct answers than participants with more than 15 years of experience. Robust regression was used for statistical analyses.

Conclusion

CTG interpretation skills were improved after the national CTG education program.

CTG interpretation skills were positively associated to a large size of maternity unit and negatively associated to years of obstetric experience.

Prospectively, one should have attention on a possible challenge in the maintenance of CTG competences at small maternity units and a possible underrepresentation of CTG education amongst experienced obstetricians and midwives.

Key words: Cardiotocographi, Education program,

Presenter name: Line Thellesen

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How long does perineal analgesia last after ice pack application?

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Introduction

Postpartum perineal analgesia can be achieved by applying an ice pack to the perineum for 10 minutes; however how long the analgesic effect lasts is still non-established and it makes developing guidelines for clinical practice difficult. This study aimed to evaluate postpartum perineal pain relief 2 hours after applying ice pack to the perineum for 10 minutes.

Materials and Method

This study presents preliminary results from a randomised controlled blind trial carried out with 69 postpartum women aged ≥18 years, with no previous vaginal birth, perineal pain ≥3 as indicated using Numerical Rating Scale (NRS) from 0 to 10, within 6- 24 hours after birth, who had not received anti-inflammatory drugs or cryotherapy in the first 24hours after birth and analgesic medication up to the previous 3 hours. The participants were stratified according to the perineal trauma severity: intact perineum/1st degree tears and 2nd degree tears/episiotomy. The random allocation occurred separately in each stratum. Women in the experimental group (n=35) received a single application of ice pack for 10minutes. To the control group (n=34), the standard care was delivered. Perineal pain intensity was explored by using the NRS in three different points of time: before, immediately after and 2 hours post intervention. Also, the NRS and one watch were delivered to the participants to indicate any change in their pain levels within two hours. The primary outcome was the reduction ≥30% in the perineal pain score immediately after the intervention and its maintenance up to 2 hours.

Results

Immediately after applying ice pack, the number of women who had pain reduced by at least 30% were significantly higher in the experimental group (82.9%), compared to the control (17.6%). Two hours later, no significant pain reductionwas observed in both groups, compared to those levels immediately after the intervention. In the experimental group 61.9% of the participants maintained by at least 30% of pain intensity reduction as scored immediately after the application, while 38.1% had their pain intensity increased within 1 hour 45 minutes in average.

Conclusion

After applying an ice pack to the perineum for 10 minutes pain intensity decreases by at least 30% and this effect lasts between 1 hour 45 minutes and 2 hours.

Key words: Ice pack. Cryotherapy. Pain. Analgesia. Perineum. Postpartum period.

Presenter name: Adriana Amorim Francisco

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INFLUENCE OF MECONIUM-STAINED AMNIOTIC FLUID ON PERINATAL OUTCOMES IN EMERGENCY CESAREAN DELIVERIES FOR NONREASSURING FETAL HEART RATE TRACINGS

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Introduction

The aim was to determine the effect of meconium-stained amniotic fluid (MSAF) on perinatal outcomes in parturients undergoing cesarean delivery for nonreassuring fetal heart rate (FHR)

Materials and Method

We carried out a retrospective study where perinatal outcomes were analyzed according to the presence or absence of meconium in AF. Those perinatal outcomes were: a 1-min Apgar score <4, a 5-min Apgar score <7, admission to the neonatal intensive care unit (NICU), umbilical arterial (UA) and umbilical venous (UV) acidaemia.

Cases were identified from a database that contained 2007 cases of cesarean deliveries for nonreassuring fetal heart rate (FHR) performed at "Virgen de las Nieves" University Hospital in Granada (Spain), between 2003 and 2013.

676 cases with MSAF(study group) were compared with 1331 cases with clear amniotic fluid (control group) using chi-square test.

Results

In the study group, Apgar score was low at one and five minutes in 7.1% and 3.7% vs 3.5% and 2.6% in the control group (p <0 05)

Newborn destination: 16% of cases with MSAF went to NICU vs 13.7% with clear AF (p 0,05)

When the results were analyzed according to the moment of occurrence of meconium, when it appears intrapartum compared with its presence before the labor, the results showed a lower 1-min Apgar score, a higher number of cases in NICU and with UA acidaemia (p<0,05)

Conclusion

-Meconium-stained amniotic fluid worsen the objective prognosis factors (Apgar and newborn destination), but not the objective one: pH.

-Meconium from an unborn baby during labour is correlated with worse prognosis than meconium antepartum.

Key words: Meconium-stained, emergency cesarean, nonreassuting fetal heart rate

Presenter name: L. Revelles Paniza

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NEONATAL OUTCOMES AND FETAL HEART RATE TRACINGS INCLUDED IN CATEGORY II OF THE NICHD

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Introduction

The objective was to study the relationship between fetal heart rate (FHR) tracings included in category II of the NICHD (National Institute of Child Health and Human developmentent) and neonatal outcomes.

Materials and Method

We carried out a retrospective study of 163 cases of cesarean deliveries for nonreassuring FHR, randomly selected from a total of 2007 of these interventions performed at "Virgen de las Nieves" University Hospital in Granada (Spain) between 2003 and 2013 .

Cases of premature births and cesareans performed during the second stage of labor (pushing) were excluded.

FHR tracings were studied during the last hour before the surgery. Its relation to umbilical artery blood pH was analyzed defining the study group as the one wich presented pH < 7.20 and the control group as the one with pH > 7.20 .

The variables studied were : Bradycardia not accompanied by absent variability; Tachycardia; Baseline FHR variability: Minimal variability, Absent variability not accompanied by recurrent decelerations, Marked variability ; Absence of induced acceleration after fetal stimulation; Recurrent variable decelerations accompanied by minimal or moderate baseline variability; Variable decelerations with other characteristics such as slow return to baseline, overshoots; Prolonged decelerations; Recurrent late decelerations with moderate baseline variability.

Results

Statistically significant differences were observed in cases of bradycardia (p=0.025); association of bradycardia with prolonged decelerations (p=0.025) and bradycardia with atypical decelerations (p=0.003)

Conclusion

-The development of fetal acidosis varies widely across the different types of category II tracings

-All FHR patterns analyzed, bradycardia is the only one which has been clearly associated with worse neonatal prognosis, either isolated or associated with other FHR tracings.

Key words: NEONATAL OUTCOMES, FETAL HEART RATE TRACINGS, NICHD

Presenter name: L. Revelles Paniza

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Caesarean Section for the Second Twin

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Introduction

Patients frequently ask about the rate and associated neonatal risk of caesarean section (CS) for twin two after vaginal delivery of twin one. We aimed to determine the rate of emergency CS for twin two and consider the impact of parity, previous CS, gestation, presentation of twin 2 and birthweight. We compared neonatal mortality rates (NMR) of first and second-born twins.

Materials and Method

We used data from the population-based Northern Survey of Twin and Multiple Pregnancy on twins delivered in the Northern region of England (1998-2012).

Results

6855 twin pairs had at least one baby alive at the onset of labour, induction or prior to planned CS. 25% (n=1699) underwent elective CS, 5.8% (n=396) emergency CS prior to labour, 40% (n=2705) vaginal delivery of both twins, 19% (n=1283) emergency CS of both twins in labour and 3% (n=209) CS of twin 2 following vaginal delivery of twin 1. NMRs were not significantly different for second and first twins born by elective CS (4.2 vs. 4.1 per 1000, RR 1.01, 95% CI 0.35-2.86 for second and first twins respectively), vaginally (35 vs. 33 per 1000, RR=1.1, 95% CI 0.8-1.4), emergency CS following vaginal delivery of twin 1 (34 vs. 9.9 per 1000, RR=3.43, 95% CI 0.72-16.33) and emergency CS following CS of twin 1 (17 vs. 21 per 1000, RR=0.78, 95% CI 0.45-1.38).

Conclusion

The rate of emergency CS for twin 2 after vaginal birth of the first was 3%. NMRs of first and second twins were not significantly different for any delivery combination.

Key words: Second twin, emergency caesarean section.
Presenter name: Dr Sophia NE Webster MRCOG

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The Effect of Interpersonal Communication Training Given According to the Travelbee Theory on Midwives' Communications Skills and Mothers' birth Satisfaction

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Introduction

This study was performed with the aim of investigating the effect on midwives' interpersonal communication skills and mothers' birth satisfaction of communications training given according to the Travelbee theory, and was an education intervention study.

Materials and Method

The study was conducted by selecting two sample groups from two different populations. All midwives (n=17) working in the delivery room of Manisa Merkezefendi State Hospital Childbirth and Children's Clinic and two independent sample groups of women who had just given birth – before the midwives' interpersonal communication training 110 people, and after it 110 people – were taken into the study. The study was carried out in three stages. In the first stage, a communication observation form prepared by the researchers was used to observe midwives' communication skills behavior by the non-participatory method. At the same time, women who had just had a normal birth were given a self-description form and a maternal satisfaction with normal birth scale. In the second stage, the midwives were given training in interpersonal communication skills for nine weeks in once-a-week sessions lasting an hour and a half each. Before and after the training, the midwives were given an empathy tendency scale, an empathy skills scale, and a communication skills evaluation scale. In the third stage, the process of the first stage was repeated.

Results

Results of the study showed that there was a statistically significant difference in the mean scores of the empathy skills scale and the communication skills behavior observation before and after the midwives' training (p 0.05). A statistically significant difference was found between mean scores on the maternal satisfaction with normal birth scale before and after the midwives' communication training ($p<0.05$).

Conclusion

The communication training given to the midwives according to the Travelbee theory developed their empathy skills and the skills which they used in communicating with the women giving birth. Normal birth satisfaction increased in women to whom midwives provided care after communication training. Interpersonal communication training prepared according to the Travelbee theory may be given to midwives in order to develop their interpersonal communication skills and to increase the birth satisfaction of women having a normal birth.

Key words: Travelbee Theory, maternal satisfaction, communication skills, communication skills training

Presenter name: S. Ildan Calim

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NEONATAL ACIDOSIS RISK IN DELIVERY DURING HOLIDAY PERIOD

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Introduction

The aim of this study is to identify whether lowering own personal holiday periods affect perinatal outcomes.

Materials and Method

A retrospective study was carried out in order to analize the deliveries ensued between 2013-2014 at the Hospital de Poniente de El Ejido (Almería, Spain). 4048 deliveries were selected once the twin deliveries and de elective cesarian section werw both excluded. July and August werw included in the holiday period. The deliveries which occured in the remaining months constitued the control group. The study variables were the cesarian section rate (excluding the elective ones), the instrumental delivery rate and the rate of the pH<7 in artery umbilical cord blood.

Results

There were a total of 5545 deliveries between July and August. Rates of low pH (0.3 vs 0.79), cesarean section (7.09 vs 5.6) and instrumental deliveries (5.6 vs 3.2) were compared in the both study groups, with no statistically significant in any of the diferent analyzed variables.

Conclusion

In spite of the number of the professionals of the staff assigned to each shift in obstetric areas was not reduced in holiday period, the amount of working hours and the staff with less experience increase. This evidence does not lead to significant changes in our environment, although the studies carrried out in English hospitals show a decline in the quality of care and worse obstetric results related to this period.

Key words: NEONATAL ACIDOSIS , HOLIDAY PERIOD

Presenter name: A. Pinto Ibáñez

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OVERNIGHT DELIVERY AS RISK FACTOR FOR NEONATAL BIRTH ACIDOSIS

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Introduction

Our purpose was to identify whether there is an increased risk of fetal asphyxia, and therefore a low pH at birth in relation to the night-time delivery.

Materials and Method

A retrospective study was carried out to analyze the births between 2013-2014 at the Hospital de Poniente of El Ejido (Almería). Previously the twin biths and the elective cesareans sections were both excluded. The study population were 2664 singleton pregnancies. As a marker of perinatal asphyxia, we based on arterial umbilical cord blood pH < 7,15; and our study population was divided into two groups according to the presence or absence of neonatal metabolic acidosis. Pregnant were grouped depending on the time of childbirth: Group 1 (8: 00 am-16: 00 pm), Group 2 (16: 00 pm-0: 00 pm) and Group 3 (0: 00 pm-8: 00 am). The percentage of neonates with pH <7,15 were respectively: 22, 85%, 35.91% and 40%. P<0.05 when we compared Group 3 with Groups 1 and 2.

Results

In our study population there was a total of 280 neonates with metabolic acidosis (pH <7,15), with a population incidence of 19.51%. The delivery during night time (12:00 pm-8: 00 am) was associated with the neonatal metabolic acidosis (OR = 1.61, 95% CI 1.24 to 2.06).

Conclusion

In our hospital, despite working with the same human and technical resources, the reasons which could justify the findings are fatigue of the staff and the organization of labor induction protocols.

Key words: OVERNIGHT DELIVERY, NEONATAL ACIDOSIS

Presenter name: A. Pinto Ibáñez

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UTERINE RUPTURE: A CASE REPORT

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Introduction

Uterine rupture is one of the most severe Obstetric complications by high morbidity and maternal and fetal mortality.

Its incidence is 1 / 10,000 births.

Previous cesarean delivery, prior cesarean section for cephalopelvic disproportion, malpresentation, induction and augmentation of labor were found to be significant risk factors for uterine rupture. While high parity, previous evacuation of the uterus, duration of labor, type of the delivery, birth and weight were not associated with uterine rupture.

Materials and Method

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Results

Pregnant women with previous caesarean section in 2011 and 38 years. Singleton pregnancies after IVF. Pregnancy controlled normal course, except Gestational diabetes with good metabolic control.In 40 SG entered by spontaneous rupture of membranes with negative GBS.Spontaneous onset of labor with epidural analgesia. After 7 hours with spontaneous and regulate dynamics reaches full dilation. 1.5 hours after presentation Hodge II plane OIIA with previous asynclitism reaching palpable fetal ear.Pregnant without pain or bleeding cesarean scar and no pathological TNS.Urgent Caesarea by cephalopelvic disproportion.After opening the peritoneum fetus visualize free abdominal cavity. Difficult fetal extraction with vacuum (Woman, 2960 gr. Apgar 9/9/10).Review of RVF uterus cavity and uterine rupture in previous uterine scar with heavy bleeding Uterine Artery Left.Hysterorraphy and hemostasis with bipolar energy and suture.During postoperative transfusion of 2 packed red blood cells.

Conclusion

An Obstetrician should be careful in monitoring the progress of labor in women with previous cesarean delivery to avoid the occurrence of a ruptured uterus

Key words: UTERINE RUPTURE

Presenter name: A. Pinto Ibáñez

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RISK FACTORS AND NEONATAL OUTCOMES OF INSTRUMENTAL VAGINAL DELIVERIES DUE TO NONREASSURING FETAL HEART RATE

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Introduction

Our target is to describe neonatal outcomes of vaginal operative deliveries due to nonreassuring fetal heart rate (NRFHR) and compare them with neonatal outcomes of spontaneous deliveries. We also compared neonatal outcomes among different types of instrumental vaginal delivery.

Materials and Method

Review of 1541 instrumental vaginal deliveries at term due to NHFHR (case group) occurred between 2008 and 2013 and comparison with 13567 spontaneous births (control group) which took place during the same period in the University Hospital Virgen de las Nieves of Granada.

A retrospective case-control study was conducted in order to compare the frequency of risk factors (RF) between mothers with spontaneous labor and mothers with vaginal instrumental delivery due to NRFHR. Risk factors: intrauterine growth retardation, oligohydramnios, premature rupture of membranes more than 24 hours, gestational diabetes, intrapartum fever, maternal age over 35 years).

Neonatal outcomes (arterial pH, venous pH, Apgar at 1st min and 5th min and need for admission to neonatal intensive care unit or NICU) between spontaneous and instrumental vaginal deliveries due to NRFHR were also compared. The same among different types of instrumental delivery.

Results

The average maternal age was 30.54 years in the case group and 30.18 in the control group. Multiparity is significantly higher in the control group (77% vs. 43%).

The average birth weight did not differ significantly between the two groups: 3199 vs. 3267g.

Risk factors for which there is a statistically significant difference between both groups are (cases vs. controls) : maternal age> 35 years 17.88% (275) vs. 15.65% (2124), intrapartum fever 4.03% (62) vs. 2 04% (278), oligohydramnios 5.13% (79) vs. 2.79% (379) and RPM> 24 hours 4.42% (68) vs. 3.13% (425).

A statistically significant difference ($p < 0.05$) were found in all neonatal outcome parameters. These parameters were worse in the case group: Apgar score <4 at 1st minute 0.97% (15) vs. 0.42% (58), Apgar score <7 at 5th minute 2.34% (36) vs. 0.62% (84), arterial pH <7.20 41.1% (569) vs. 16.30% (1089), venous pH <7,20 21,12% (301) vs. 3.73% (456), admission to NICU 0.45% (7) vs. 0.18% (25). However, no significant differences were found when comparing the types of instrumental vaginal delivery among them.

Conclusion

It is confirmed that an adequate analysis of NRFHR situations using the fetal heart rate trace was performed as neonatal outcomes are significantly worse in this group, not being influenced by the type of instrument used. However, the increased presence of risk factors in the case group influences in neonatal outcomes in this group.

Key words: NEONATAL OUTCOMES, INSTRUMENTAL VAGINAL DELIVERIES, NONREASSURING FETAL HEART RATE

Presenter name: A. Pinto Ibáñez

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ALTERATIONS OF FETAL HEART RATE IN CASES OF UTERINE RUPTURE AND DEHISCENCE

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Introduction

Our goal is to assess the usefulness of fetal heart rate (FHR) and uterine activity (UA) traces for early diagnosis of uterine wall injury trying to identify what changes are related to the event.

Materials and Method

A retrospective analysis of cases of uterine wall injury occurred between 2003 and 2013 at the University Hospital Virgen de las Nieves of Granada was performed.

In all cases the cardiotocographic (CTG) trace analysis was performed during the hour prior to delivery according to the classification of the National Institute for Child Health and Human Development (NICHD) trying to establish a relation with the underlying uterine lession by Chi-square method.

Other data with possible relation to uterine rupture or previous uterine scar dehiscence were collected: Obstetric history, birth weight, gestational week and mode of onset of labor.

Results

During the study period, a total of 2008 cesarean sections was performed, identifying 29 cases of uterine wall injury (incidence 1.4%): 23 previous scar dehiscences and 6 ruptures (3 uterine ruptures owing to the extension of the scar through healthy myometrium and 3 patients with no history of previous cesarean section).

The average maternal age was 33.1 ± 4.7 years, the average gestation period was 39 ± 3 weeks, the average birth weight 3272 ± 495g. In 26 cases there was a history of previous cesarean section. The onset of labor was spontaneous in 17 cases (58.6%), 11 (37.9%) induced and a planned caesarean section. The mode of delivery was: 27(89%) cesarean sections, one instrumental vaginal delivery (3.4%) and one spontaneous labor (3.4%). Three abruptio placentae took place (2 in relation to uterine rupture).

No significant relationship between UA and FHR patterns and the underlying lesion. The FHR patterns are distributed as follows: 8 (27.6%) category I, 16 (55.2%) category II and 5 (10.3%) category III.

There weren't any decelerations in 9 of cases (31.03%). There were late decelerations in 3 of cases (10.34%), 15 cases with variable decelerations (51.7%) and 2 cases with early decelerations (6.9%) . Regarding variability: it was absent in 5 cases (10.3%), low in 9 cases (31.03%). Tachycardia was present in one case (3.4%) and there was a case of bradycardia (3.4%).

Regarding uterine contractions, they have an irregular pattern in 11 cases (37%) and tachysystole in 1 case (3.4%). "Staircase sign" (progressive decrease in the intensity of contractions) was present in only two cases (6.9%). The rest of cases (49.3%) had a regular UA pattern.

Conclusion

A significant relationship between UA and FHR patterns and the underlying lesion is not found. In most cases there is a category II FHR and irregular uterine contractions, both very nonspecific. Alterations in FHR and UA described in classical literature in cases of uterine rupture do not occur frequently. The explanation lies in the fact that uterine rupture is a rare complication, being the most frequent the previous scar dehiscence.

Key words: FETAL HEART RATE, UTERINE RUPTURE, UTERINE SCAR DEHISCENCE

Presenter name: A. Pinto Ibáñez

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AMNIOINFUSION AND PERINATAL OUTCOMES IN EMERGENCY CESAREAN DELIVERIES FOR NONREASSURING FETAL HEART RATE TRACINGS WITH MECONIUM-STAINED AMNIOTIC FLUID.

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Introduction

The aim of this review was to assess the effects of Amnioinfusion on perinatal outcomes in parturients undergoing cesarean delivery for nonreassuring fetal heart rate (FHR) tracings with meconium-stained amniotic fluid (MSAF)

Materials and Method

We carried out a retrospective study where perinatal outcomes (a 1-min Apgar score <4, a 5-min Apgar score <7, admission to the neonatal intensive care unit (NICU), umbilical arterial and venous pH <7.20) were analyzed comparing amnioinfusion with no amnioinfusion for women in labour. Cases were identified from a database that contained 2007 cases of cesarean deliveries for nonreassuring fetal heart rate (FHR) performed at the Hospital "Virgen de las Nieves" University Hospital in Granada (Spain), between 2003 and 2013. 676 cases had MSAF, Amnioinfusion was used in 146 cases (study group) versus 530 cases wihout Amnioinfusion(control group).

Results

-1-min Apgar score was low in 4.8% cases with Amnioinfusion compared to 7.7% without it (p <0.05).
-5-min Apgar score was low at 1.4% cases in the study group versus 4.3% in the control group (p <0.05)
-Newborn destination: 13% of the study group went to NICU, compared to 16.8%. (pNS)
-Umbilical arterial pH was low in 30.4% of cases with Amnioinfusion compared with 30.5% without it (pNS)
-Umbilical venous pH was low in 16.8% of cases with AF versus 20.3% without it (pNS)

Conclusion

Although we obteined a better Apgar score in the group of Amnioinfusion, the rest of the results are consistent with current evidence, so that Amnioinfusion does not improve neonatal outcomes with meconium-stained amniotic fluid (MSAF)

Key words: Amnioinfusion, emergency cesarean, non reassuring fetal heart rate

Presenter name: L. Revelles Paniza

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Post-partum blood transfusion rates according to Robson's Ten Groups- A two year review

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Introduction

Obstetric haemorrhage remains one of the main causes of maternal morbidity and mortality both in developed and developing countries. Blood transfusion plays a key role in the management of haemorrhage in both the antenatal and postnatal period. We sought to investigate blood transfusion patterns across Robson's ten groups to identify those most likely to require a blood transfusion during the post-partum period.

Materials and Method

This was a retrospective analysis of prospectively gathered data, carried out at a large tertiary referral center serving a single urban population over a 2 year period between 2012 and 2013. All cases of post-partum blood transfusion were included and analysed according to Robson's ten Groups.

Results

During the two year period, 2012-2013, there were a total of 18,096 babies weighing 500g or more born to 17,716mothers at the National Maternity Hospital. A total of 873 Units of packed red cells were transfused to 299 (1.6%: 299/17,716) women with 55 (0.3%: 55/17,716) women receiving four or more units of packed red blood cells. Among the ten groups, group eight, representing all multiple pregnancies, had the highest incidence of blood transfusion with 5.6% (20/352)requiring a blood transfusion, of which 0.2% (1/352) required more than four units of blood. Group one, representing nulliparous, single cephalic pregnancies in spontaneous labor, had the lowest incidence of blood transfusion with only 1.5% (66/4148) requiring packed red cells as part of their post-partum care. As would be expected induced singleton pregnancies had an increased requirement for packed red cells when compared to their spontaneous counterparts, with 2.0% (95/4608) versus 1.1% (106/9421) requiring the blood product. There was no morbidity or mortality associated with the transfusion of blood products during the study period.

Conclusion

Transfusion of blood products plays a major role in the reduction of morbidity and mortality associated with obstetric haemorrhage. This study provides a concise overview of the transfusion requirements across Robson's ten groups thus allowing for more accurate risk assessment and with it a reduction in maternal morbidity and mortality.

Key words: haemorrhage, blood transfusion
Presenter name: Michael Wilkinson

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Looking forward to neonatal status by perinatal features

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Introduction

Perinatal asphyxia is the state in which placental or pulmonary gas exchange is compromised or ceases altogether, typically producing a combination of progressive hypoxemia and hypercapnia. Multiple factors eg. obstetrical, fetal, maternal, during birth and delevery should influence the early outcome of the newborn. Umbilical cord aspects and laboratory results from umbilical blood samplings mirrors the action of this factors.

Aim: The study aims to establish a predictive correlation between umbilical cord features and early outcome with subsequent care.

Materials and Method

In an analytical study performed on cases with perinatal asphyxia, we analyzed the appearance of the umbilical cord, Apgar score at birth, blood gas analysis, the number of erythroblasts in term and preterms infant vaginaly or cesarean section delivered in a level III maternity from Bucharest. We watched immediate evolution and outcome of new-borns.

Results

Were studied term and preterms neonates from natural pregnancy or in vitro fertilisation, coming from mothers aged 15-40 years. There is correlation between maternal pathology, delivery (cesarean section or spontaneous), umbilical cord apperance, blood gas analysis (pH, lactate), the number of erythroblasts and immediate or late outcome.

Conclusion

Perinatal team could anticipate and prepare for imediate care based on perinatal features of umbilical cord.

Key words: asphyxia, blood gas analisys, nucleated red blood cells, umbilical cord, newborn

Presenter name: Ramona Mohora

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A WIDENED PERSPECTIVE OF BIRTH - PRELIMINARY RESULTS OF MIDWIFERY CONTINUITY OF CARE FROM TWO DANISH HOSPITALS AND DISSEMINATION OF THE PRACTISING MIDWIFES' EXPERIENCES WITHIN THE MODEL

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Introduction

Giving birth within the Danish health system is traditionally considered an event associated with a number of rationally defined risk factors. The perspective is to make birth safer by navigating through pregnancy and birth according to arising moments of risk. The focus on measurable elements of pregnancy and birth associated with potential hazards and unwanted conditions is thus central in the traditional models of care. In the Danish model "Midwifery Continuity of Care", also referred to as care from a known midwife, the continuous relation between the family and the midwife is in focus and is thought to form a platform of trust and confidence that enables the family to find its own way into pregnancy and birth. The safety perspective is supplemented with the recognition of birth as a miraculous life event for the family. The family is the main character playing an active part in finding the best way through pregnancy and birth supported by the relation to the known midwife.

Materials and Method

In Australia, care from a known midwife has been offered families for several years. In the Cochrane Library a review of midwifery continuity of care including 13 trials involving more than 16.000 women shows that the continuous relation between the midwife and the family has positive effects on a wide range of outcomes when compared to traditional care. Women were more likely to have a normal birth, to feel in control during labour, and were less likely to have an instrumental birth, or, to need epidural compared to women who had other models of care. Other studies imply that women receiving care from a known midwife are less likely to have caesarean section, report to have better physical and emotional coping, a more positive birth experience, and more spontaneous onset of labour and less induction compared to other types of care.

Results

The paper presents preliminary results from the Danish midwifery continuity of care model offered families assigned to one of two hospitals in the western unit of Denmark since 2013 and including data from 1362 births. Results show a significant tendency towards less use of epidural, shorter time from admission to hospital and birth, and fewer births stimulated with oxytocin in the group of women cared for by a known midwife compared to women receiving traditional care. Furthermore, it is our experience, practicing as known midwifes, that working with a widened perspective of birth inspires to involvement and engagement in the continuous relation with the families.

Conclusion

In offering families a continuous relation with a known midwife, we see measurable positive effects for natural birth. This acknowledges the perspectives that giving life to a new human being is a complex biological process where undefined and abstract factors such as trust and confidence have an influence on the outcome. It gives a humble respect to the fact that pregnancy and birth are events in life greater than the sum of all measurable elements.

Key words: continuity, birth, care, known midwife

Presenter name: Rikke Hesselhøj

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Congenital diaphragmal haernia- management during pregnancy and delivery

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Introduction

Congenital diaphragmal hernia (CDH) is a congenital malformation of the diaphragm which allows the contents of the abdomen to move up into the fetal chest. CDH is a life-threatening pathology in infants with pulmonary hypoplasia and pulmonary hypertension as most often complications which can be life-threatening unless treated appropriately. CDH has a mortality rate of 40-62%. Individual rates vary greatly dependent upon multiple factors; size of hernia, organs involved, additional birth defects or genetic problems, amount of lung growth, age and size at birth, type of treatments, timing of treatments, complications such as infections and lack of lung function. With advances in surgery and care, the survival rate is now upwards of 80% if is recognised on time which means during pregnancy. Unfortunatelly the diagnose of diaphragmal haernia is established after delivery, therefore reduces the opportunity to prepare for the wright care and treatment. .

Materials and Method

The data were collected from the medical documentation, with permission of the parents.

Results

We present a case of a fetus with severe congenital diaphragmal hernia diagnosed and followed during pregnancy and delivery in our Clinical Hospital Center.

At 17 weeks of pregnancy during routine ultrasound exam abdominal organs were found in the thoracic cavity with the heart moved to the side. The diagnose was confirmed with MR. Also other anomalies were excluded. The patient was regularly monitored by ultrasonud until the 37 weeks of pregnancy when the elective cesarean delivery was performed. The baby was immediately transported to the Neonatal Surgical care Unit where after primary care and evaluation of severity of the disease was operated. After the surgery the baby recovered well. The left lung recovered almost full, and the wright lung partially. In the further course the full recovery of the patient is expected.

Conclusion

The mortality of newborns diagnosed with diaphragmal hernia is still high but not because of reduced treatment options but due to the too late diagnosis. The diagnosis of congenital haernia in the wright time during pregnancy is extremely important. Enables preparation of the parents and the medical team for the intervention immediately after the delivery but also enables programming of the time of delivery. Having that in mind the better recognition of this malformation during pregnancy should improve with consequent reduction of mortality rate in newborns diagnosed with congenital diaphragmal hernia.

Key words: diaphragmal hernia, newborn, management
Presenter name: Vesna Gall

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Puerperal uterine inversion - a case report

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Introduction

Puerperal uterine inversion is a rare complication of vaginal delivery although it is a life-threatening obstetrical emergency. If not promptly recognized and treated, uterine inversion can lead to severe haemorrhage and shock, resulting in maternal death. The duration of time elapsed from moment of diagnosis to that of correction, along with rapid resuscitation measures are of utmost importance in its prognosis. A case managed successfully is described.

Materials and Method

Not applicable

Results

A 35-year-old caucasian woman was admited in our unit in April 2014 in active phase of labor (8 cm of dilatation). In obstetrical history stands out a vaginal birth in 2011.

After 15 minutes, she gaves birth by normal delivery a newborn with 2950 g of weight.

During the third stage of labor was noticed that a smooth round mass was protruding from the cervix and on transabominal palpation, the uterine fundus is absent at its expected periumbilical position. It was made the diagnosis of acute complete uterine inversion. It was made an immediately attempt to manually replace the inverted uterus to its normal position and the patient was taken to the operating room.

Uterotonic agents (oxytocin infusion) were administered to induce myometrial contraction, maintain uterine involution and prevent reinversion and there was no need of surgical intervention. The patient was hemodynamically stable during all the procedure.

Conclusion

The low incidence of uterine inversion leads to sparse experience in resolving this obstetrical emergency. The best prognosis occurs in situations where the diagnosis and maneuvers for uterine reversal are made at an early stage.

A delay in diagnosis or in prompt initiation of treatment increases the risk of maternal morbidity and mortality.

Key words: Puerperal uterine inversion

Presenter name: Joana Cominho

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Postpartum venous thromboembolism – a case report

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Introduction

Venous thromboembolism (VET) is one of the leading cause of maternal death. As mentioned in literature, pregnant women have a fourfold increased risk of thromboembolism compared with non pregnant women and puerperium is the period where the risk is maximum.

Materials and Method

Not applicable

Results

A 35-year-old woman gave birth in our unit by caesarean section delivery in December 2014. She denies smoking habits and had a BMI of 27 (weight 66.4 Kg). In obstetrical history stands out 2 caesarean section deliver. She gave birth by elective ceasarean section at 38 weeks, without complication, with apgar score of 10/10. She stayed in hospital 3 days postpartum with no complication in this period. Fifteen days after caesarean, she went to emergency department with left inguinal pain with seven days of evolution. In clinical examination was noted inguinal left adenomegalies, edema and functional impairment of left lower limb. In laboratory data stands out hemoglobin 10,7 g/dL ; Platelets 208000X109/L, Dimers-D 4,4 mg/L (< 0,50). The colour Doppler ultrasound of left lower limb revealed “Common iliac vein, external iliac vein, and femoral vein have increased dimensions, filled with hipoecoic contente without doppler sign within – Signs compatible wtih extensive deep vein thrombosis”. She started 60 mg twice daily of enoxaparin, diosmin and NSAID’s. She repeated eco-doppler 3 days after the first “Still observing extensive deep vein thrombosis of sub acute characteristics, involving common femoral vein and proximal superficial femoral vein, without signs of repermeabilization. Thrombosis extents to external iliac vein and left iliac vein, without flow”. She was referenced to vascular surgery appointment and had clinical discharge 5 days after, with significant clinical improvement.

Conclusion

In pregnancy and puerperium is necessary to evaluate risk factors for thromboembolism in a continuous way. The risk factors are changeable and intrapartum risk factors shouldn’t be missed as they are of maximum importance for risk calculation for postpartum thromboembolism.

Key words: venous thromboembolism
Presenter name: Joana Cominho

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PROLONGED SECOND STAGE OF LABOUR AND ITS EFFECTS ON MODE OF DELIVERY, MATERNAL, FETAL AND NEONATAL OUTCOMES

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Introduction

The objective of the research was to describe the time limits for the second stage of labour and the effects of the prolonged second stage on the mode of delivery, maternal, fetal and neonatal outcomes.

Materials and Method

The research method was qualitative. Up-to-date evidence-based literary sources (N=73) were identified and examined; 41 of them were scientific articles.

Results

As a result of the research a literature overview has been composed, the main conclusions of which are:

Conclusion

The second stage of labour is conventionally defined as the period from full dilatation of the cervix up to the birth of the neonate. There is no consensus on the time limits of the second stage considered acceptable. The length of the second stage increases when the woman is primiparous and when epidural analgesia is used. Delayed pushing is associated with prolongation of the second stage but shortened duration of active pushing.

Prolonged second stage is associated with the increased risk of caesarean section and instrumental delivery. Risks for maternal morbidity are higher when a caesarean delivery is performed after a prolonged second stage (compared with a caesarean delivery performed during the first stage of labour). The prolonged second stage is associated with increased risk of the following maternal outcomes: postpartum haemorrhage, severe obstetric lacerations and infection. Prolonged second stage is associated with increased likelihood of postpartum incontinence and pelvic organ prolapse.

Some studies have found no significant relationship between the duration of the second stage and fetal / neonatal outcomes. According to other studies in case of prolonged second stage the risks for following fetal / neonatal measures are increased: meconium-stained amniotic fluid, lower 5-minute Apgar score, admission to NICU, sepsis, birth trauma and perinatal mortality.

Key words: prolonged second stage of labour, mode of delivery, maternal outcomes, fetal outcomes, neonatal outcomes

Presenter name: L.Raag

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THE SINGLE CEPHALIC, TERM, NULLIPAROUS WOMEN IN SLOVENIA FROM 2003 TO 2012: TRENDS IN CAESAREAN SECTION RATE

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Introduction

Aim of the study was to examine Slovenian single cephalic, term (≥ 37 weeks of gestation), nulliparous caesarean section (CS) rate in a 10-year period, applying the Robson's 10-group classification system. In this study we present nulliparous caesarean rate relating to onset of labour and indication for CS. To reduce the overall CS rate, more effort should be made in reducing the primary CS rate.

Materials and Method

Data from the Slovenian Perinatal information system from 2003 to 2012 were collected. A total of 65,747 women in Robson's group 1 (RG 1) were divided in two subgroups according to labour onset; subgroup A: labour onset with contractions, and subgroup B: labour onset with prelabour rupture of membranes (PRM). 18,683 women in Robson's group 2A (RG2A) were further divided into two subgroups according to the type of induction, first (1): artificial rupture of membranes (ARM)+oxytocin and second (2): prostaglandin E2 locally. The CS rates were examined and compared in two 5-year periods (2003-2007, 2008-2012). Indication for CS was compared within all subgroups.

Results

From 2003 to 2012 a total of 11,982 CS in group 1 and 2 were performed among overall 28,581 caesareans. Between two 5-year periods, group 1 and 2 caesarean rate increased from 12,5% to 15%; at the same time, the Slovenian overall caesarean rate increased from 13,7% to 16,8%. Moreover, there is no significant variation in percentage of women in each group of 10-group classification system. Exploring further, RG1A CS rate rose from 7,3% to 8,9%, and RG1B from 11,5% to 12,9%. In RG2A1 the CS rate increased from 15,2% to 18,4%, and in RG2A2 from 20,9% to 26,6%. The most common indication for CS was cephalopelvine disproportion (CPD), its rate increased in most subgroups. Other indications were more or less in the same range. Acute fetal distress was the most frequently seen in RG1A and with prostaglandin E2 induction, less frequently with ARM+oxytocin. Irregular contractions and cervical dystocia were problems occurring especially with prostaglandin E2 induction, less often with ARM+oxytocin and in RG1B.

Conclusion

The increase in overall caesarean section rate correlated well with the increase of term, single cephalic, nulliparous induction caesarean rate and especially with the increase of CS rate in RG2A, although the labour induction rate remained almost the same. There was more contraction irregularity, cervical dystocia and acute fetal distress within prostaglandin E2 induction compared to ARM+oxytocin, however it was the CPD that has been the most common indication for CS in all subgroups. According to these findings we should emphasize that irregularities in delivery progress are very likely a consequence of medical interventions; such as decision for induction, use of oxytocin, estimation of delivery progress etc. In order to have any influence on the increasing CS rate this should be our focus in the future.

Key words: caesarean section rate, Robson's classification system, labour induction, spontaneous labour, indication for caesarean section

Presenter name: Anita Frelih Fabjan

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LATE MISCARRIAGE CAUSED BY SERRATIA MARCESCENS: A RARE BUT DIRE DISEASE IN PREGNANCY – CASE REPORT

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Introduction

Chorioamnionitis or intraamniotic infection is an acute inflammation of the membranes during pregnancy. Overall, 1–4% of all births are complicated by chorioamnionitis. Several serratia species are widely distributed in nature: in freshwater and saltwater, on leaves, fruits, and vegetables. However, the only serratia species frequently isolated in hospitals is Serratia marcescens. This pathogen, which sometimes colonizes respiratory and urinary tracts, can be responsible for nosocomial infection, mostly in immunocompromised hosts. Serratia septicaemia is a rare but dire disease in pregnancy. To date, three such cases with maternal morbidity and resultant fetal loss have been reported, but the underlying basis for such fulminant manifestation is not understood.

Materials and Method

Case report.

Results

31-year-old pregnant woman (gestation of 15 weeks), previously healthy, 6 Gesta 2 Para (3 spontaneous abortions), admitted on the emergency ward by hyperthermia, hemicranial headache, nausea, vomiting and diarrhea and no obstetric complaints. She had been observed for 1 week and treated with paracetamol and indication for surveillance. By persistence and worsening of symptoms she was admitted in the inpatient clinic for etiologic study (febrile syndrome with apparent gastro-intestinal starting point with suspected infection by Listeria). The patient started antibiotic therapy with ceftriaxone and ampicillin. It was performed a lumbar puncture – cytochemical and bacteriological examination and PCR for Listeria - which was negative, and septic screening with urine culture (negative) and blood cultures in febrile peak (positive for Serratia marcescens, sensitive to established antibiotics). The serological study status was unremarkable. The laboratory tests showed leukopenia, thrombocytopenia and lymphopenia (91% neutrophils). During hospitalization, the pregnant woman presented with clinical and analytical progressive improvement, with sustained apyrexia. On the 8th day of hospitalization she began pelvic pains and brown odorless vaginal discharge. Cervical exudate was collected for microbiological examination, which was also positive for Serratia marcescens. On the 10th day of hospitalization she aborted spontaneously. The pathological study revealed male fetus with appropriate maturity and development for 16 weeks of pregnancy and placenta with marked lesions of an acute inflammatory process with necrosis compatible with infection caused by Serratia marcescens. The patient was discharged on the 12th day of hospitalization, asymptomatic, treated with ceftriaxone, to complete treatment on day 14. The follow up consultation (6 weeks after the miscarriage) do not reveal any clinical or obstetric abnormalities.

Conclusion

We present a case of chorioamnionitis with Serratia marcescens in a 15 weeks pregnant woman resulting in a late miscarriage. Macroscopic and histological examination of the placenta showed that the chorioamnion served as a site for persistent infection in this patient. Serratia marcescens was only reported in 3 non-immunocompromised hosts as a cause of persistent chorioamnionitis and subsequent miscarriage. Our case is the fourth one. Although there have been no reports of large series of cases, physicians should be aware of the association between serratia infection and spontaneous abortion.

Key words: Chorioamnionitis, Late miscarriage, Serratia marcescens
Presenter name: Emídio Vale-Fernandes

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CONSUMPTION OF TOBACCO AND PREGNANCY. TO PURPOSE OF A CASE.

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Introduction

Smoking is a global health problem due to its high morbidity and mortality associated with and unfortunately also affects a significantly high percentage of pregnant women. There is growing evidence that this habit during pregnancy is responsible for a large number of obstetric, neonatal and development pathologies.

In utero exposure to cigarette smoke should be considered as a different form of passive exposure to cigarette smoke, because the fetus is not directly exposed to the smoke. The concentrations of nicotine and cotinine in women who smoke during pregnancy and in their children at birth, indicate that the children of smoking women have a systemic exposure to the tobacco toxins, and that from the moment of conception, the fetus is exposed to the same levels of nicotine as the active smoker.

Materials and Method

Review of scientific literature in the databases PubMed and Uptodate in the last six years in English and Spanish

Results

Pregnant woman of nine weeks of gestation (NHC:71985) who attends to consultation with her primary care midwife. Gesta, with no personal or family history of interest. Gestation obtained through assisted reproduction techniques.

In the clinical interview the gesta exposes to the midwife that she consumes a packet of cigarettes a day and explains her desire to withdraw the smoking habit and her high level of motivation to achieve this but she requests the aid of a professional.

The midwife informs her about the problems associated with the consumption of tobacco in the fetus and the inherent complications for gestation. The midwife arranges with the pregnant woman a progressive reduction in the number of cigarettes per day depending on her capacity to do this and to achieve its total withdrawal before the end of the pregnancy.

To do this, the monitoring will be continued with a frequency of a visit once a month. If the pregnant woman needs a consultation outside of that visit regime, she will attend the visit without an appointment.

The reducion of the number of cigarettes per day is not set in the first consultation since the level of motivation of the woman is already high. It is stated that the knowledge of the associated complications with the consumption of cigarettes is strengthened in each visit and that the woman receives support and encouragement to achieve the set goal. In the successive visits the woman reduced the consumption of cigarettes from 20 cigarettes a day to 10 cigarettes the following month, 5 cigarettes in two months and none in three months.

Conclusion

Maternal smoking during pregnancy poses a serious problem both for the development of the process of gestation as well as to the product of the gestation.

It is in the neonatal period and in the early years of life when the first respiratory effects arising from in utero exposure to tobacco appear, with a higher incidence of neonatal respiratory distress syndrome, sudden death, recurrent wheezing, bronchial hyperreactivity, increased risk of hospitalisation, lower respiratory infections and increased incidence of asthma in childhood and adolescence.

For all of these reasons, it is vital to offer advice and support for cessation of smoking from all levels and especially at Primary Health Care having the figure of the midwife as a fundamental pillar of support.

Key words: pregnancy, tobacco, perinatal outcomes

Presenter name: María del Mar Carrillo Martínez

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Severe maternal infection and non-reassuring CTG in a preterm fetus - What to do?

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Introduction

When a pregnant woman develops an infection, the infant's neurological outcome depends on many factors, especially the gestational age at the time of the infection.

The aim of electronic fetal monitoring using CTG is to identify a fetus exposed to hypoxic insults, so that timely and appropriate action could be instituted to improve perinatal outcome. Features observed on a CTG trace reflect the functioning of somatic and autonomic nervous systems and the fetal response to hypoxic insults. However, every guideline on electronic fetal monitoring exists for term fetuses. So, in preterm fetus, interpretation turns difficult and controversial. It is important to realize that physiological reserves available to combat hypoxia are less than those available to a term fetus. Hence, a preterm fetus may suffer a hypoxic insult sooner, particularly in case of insult arising from a serious maternal infection, not responding to antipyretics and antibiotics, and the CTG turns non-reassuring.

Materials and Method

Case report

Results

The authors report a case of a 35 years old pregnant woman in her 29th week plus 6 days of gestation, so far with no complications recorded, who came to our obstetric emergency service because of a two day persistent fever (39 Celsius degrees, maximum) but no other subjective complains. She also brought an obstetric ultrasound made on the eve, describing a fetus with a fine weight and amniotic fluid for its gestational age, normal morphology, except for a hyperechoic bowel that had never been previously observed, and a doppler fluxometry almost reaching the lower limit of normality. The mother's physical examination was normal, showing no apparent cause for the fever. The urine sample revealed nitrites and leucocytes but there were no complains of dysuria or lower back pain. Murphy´s sign was absent. Blood analyses showed Leukocytosis with a white blood cell count of 19.500 and high number of neutrophils and a very high C-Reactive Protein (158 mg/L) with any other significant change. Intravenous antibiotic therapy was started, as well as antipyretics. CTG monitoring was performed and the trace turns out non-reassuring. The medical team decided to wait for apyrexia to be restored as well as the fetal heart frequency, but CTG trace did not improve for better. A C-section delivery was performed and the newborn had to be intubated, ventilated and immediately taken for the Neonatal Intensive Care Unit with a poor prognosis. The Apgar score was 4/6 at the 1st and 5th minutes and there was evidence of an ongoing sepsis.

Conclusion

In view of the absence of guidelines and recommendations monitoring preterm fetuses, even further in the presence of severe maternal infection, the decision when to terminate pregnancy and deliver a baby determined to face the consequences of prematurity and an already established intra-uterine hypoxic injury, is a very delicate and tough both for the parents and the doctors. Corticotherapy was considered but not taken, considering the urgency to deliver the baby and the severity of the maternal infection. Further research is needed to support doctors to promote the best assistance in such cases.

Key words: maternal infecion; non-reassuring CTG; preterm fetus

Presenter name: Bárbara Faria

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POSTPARTUM HEMORRHAGE. TO PURPOSE OF A CASE

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Introduction

Postpartum hemorrhage is one of the most feared obstetric complications. There is no consensus on its definition but the most accepted is that in which a 500ml blood loss is experienced after a vaginal birth or 1000 ml after a cesarean. Early postpartum hemorrhage is the one that occurs during the first 24 hours after birth and is usually the most severe. The diagnosis is clinical and treatment must includes general helps for mother life and more specific ones with etiological character.

Materials and Method

Review of scientific literature in the databases PubMed and Uptodate in the last six years in English and Spanish

Results

A 36-year-old three times pregnant, no important personal history. Her previous births occurred at full-term without complications. She is in expulsive period after normal dilation without epidural analgesia. After the newborn exit, expectant management of the birth is performed. When the placenta is completely outside, an active bleeding that does not stop appears from uterine cavity after reviewing the soft birth canal. The uterus state is checked and it is not contracted without regress. Ones it is probed that there is an uterine atony, is necessary to start with the appropriate cares as set out below:

Important to start with an uterine massage while 30 units of oxytocin are supplied intravenously. Catheterization was performed. As hemorrhage did not end, they gave her an ampoule of intramuscular Methergin, while continued with the uterine massage. Blood pressure was taken: 90/60. The more contracted uterus is palpable but continues with heavy bleeding. The next step made was the administration of four tablets of misoprostol 200µg rectally. After twenty minutes of misoprostol administration with the combination of uterine massage, bleeding began to subside. Two hours after these maneuvers, the share of early postpartum blood loss was normal. A blood extraction was performed to assess the state of hemoglobin, the result showed a fall of four points respect to its previous analysis, so a blood transfusion was required. The control blood was within normal limits, so that after 48 hours they proceeded to discharge.

Conclusion

• Uterine atony is the most common cause of early postpartum hemorrhage.
• The active birth reduces the frequency of occurrence of early postpartum hemorrhage.
• It is essential a rapid and sequential manage of the situation, providing the means and staffed required for the proper resolution of this complication.

Key words: POSTPARTUM HEMORRHAGE, TREATMENT, PREVALENCE

Presenter name: María del Mar Carrillo Martínez

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PERINATAL OUTCOMES IN FETAL MACROSOMIA

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Introduction

The objective was to analyze the obstetric and perinatal outcomes of those fetuses with weight > 4000 grams.

Materials and Method

Retrospective study where we collected 2262 fetuses with birth weight >4000 grams between January 2003 to December 2013. This variable was related to neonatal outcomes.

In a second stage, the sample was divided using the median weight (4200 grames) as a cutoff point, to analyze differences significatives.

Results

The average maternal age was 30.97 years and 26,9 % of fetuses> 4000 gr were observed in pregnants over 35 years.

33,7% of newborns were females and 66.2 % were males, the distribution of fetal sex did not show statistically significant differences but there were more males newborns between the macrosomas ones.

71,9 % of the gestations finished over 280 days.

About the beginning of the labour, 65% started in a spontaneous way, 29% had their labor induced and 6% were an elective caesarean. There were no significant differences between both groups of comparison (p=0.111).

According to the mode of delivery: 54,6% spontaneous, 4.5 % spatulas, 7.3 % vacuum, 5.8 % forceps and 27.8 % caesarean.

APGAR score was:

APGAR	%	N
APGAR 1 minuto <7	5.3%	17
APGAR 5 minutos <7	1.2%	28

Arterial and venous pH:

pH	valores	%	N
pH arterial	<7.20	18.9%	388
pH venoso			

4200 grams in pregnants over 35 years(p=0,001).

We divided the mode of delivery in eutocic and operative delivery (instrumental and cesarean) and it was obtained:

	4200g	Total
EUTOCIC	57.1%(787)	50.8% (450) 54.6% (1234)
INSTRUMENTAL	42.9%(584)	49.2%(436) 46.4% (1020)

p 7) respectively, there being no differences in those fetuses> 4200 grams with one p not significant. (no entiendo esto lo que quieres decir, si lo leyera en español creo que si)

Arterial and venous pH:

pH	4200 g	Total
pH arterial <7.20	18.6% (233)	19.% (155) 18.9% (388)
pH venoso < 7.20	5.2% (73)	5.3% (42) 5.5% (115)

A quantitative decrease in umbilical pH was observed in ¿¿fetuses of major weight?? (no se esto si es asi), but the differences were not significant.

Fetuses over 4200 grams needed more perinatal cares (basic or intensive) than fetuses under 4200 (p <0.001)

Conclusion

Heavier birth weight involves a increase number of instrumental and neonatal cares, but it has no impact in neonatal outcomes indicators: pH and Apgar score.

Key words: macrosomia, fetus, perinatal outcomes

Presenter name: Amira Alkourdi

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Assessing the agreement for the decision and indication for cesarean section

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Introduction

Indication-based audits are accepted as a method of reducing cesarean section (CS) rates and a way of encouraging discussion among staff members. The objective of this study was to evaluate the intra and interobserver agreement, among obstetricians, on the decision and the indication for an emergent CS, and whether there was margin for reducing the proportion of CS performed in our hospital.

Materials and Method

In our hospital, CS audit was implemented at daily clinical meetings in 2002. This was a prospective study that included the first 92 emergent CS performed in 2014, excluding elective indications for CS. Emergent indications were "failed induction of labour", "failure to progress" and "fetal distress". Several sessions were scheduled, in which two senior obstetricians and one resident presented the CS cases, including the obstetrical chart (ObsCare®), partogram (Maternum®), cardiotocography and ST analysis (OmniView Sis-Porto®). A panel of 4 senior obstetricians answered a questionnaire on classification of the decision and indication for CS, in each case. A subsample of thirty cases was classified twice by the same experts, to evaluate the intraobserver agreement. The observers were blinded for the real indication of the CS, maternal and neonatal outcomes. Fleiss' Kappa and Cohen's Kappa were used to assess inter and intraobserver agreement, respectively. We used generalized linear mixed models to evaluate whether there were differences in decision agreement according to obstetrical indication.

Results

From a total of 92 cesareans, 56.5% were performed for "failure to progress", 32.6% for "fetal distress" and 10.9% for "failed induction of labour". Fair interobserver agreement was found for CS decision ($k = 0.327$, $p < 0.001$). Each observer agreed with the decision to perform a CS in 88.2%, 73.9%, 68.3% and 63.2% of the cases. In 68.4% of the cases, more than 50% of the observers agreed with the decision to perform a CS (all observers agreed in 55.4% of cases, 3 out of 4 observers agreed in 8.7% of cases and 2 out of 3 observers agreed in 4.3% of cases). In 9.8% of cases, all the raters disagreed with the decision to perform a CS. The interobserver agreement for cesarean indication was moderate ($k = 0.57$, $p < 0.001$). There were no significant differences in the decision agreement rate regardless the obstetrical indication. The mean intraobserver agreement on the decision to perform a CS was moderate ($k = 0.43$, ranging from 0.25 to 0.71).

Conclusion

Although fair to moderate interobserver agreement was found, only in few clinical cases all the observers disagreed with the decision to perform a CS. Therefore, in our hospital, it is unlikely that an additional CS rate reduction will occur due only to indication-based audits. Indication-based classification may not be the best system for auditing, analyzing and comparing emergent CS rates.

Key words: cesarean section; agreement; obstetrical indication; delivery; classification system

Presenter name: C. Peixoto

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PLACENTA AND POSSIBLE USES AND BENEFITS IN ALTERNATIVE MEDICINE

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Introduction

Several scientific researches indicate that placenta contains multiple cells with pluripotent capacity as well as hormonal and nutritive substances.

There are different cultures around the world where the placenta has been object of rituals, and what´s more, after birth, it is used in alternative medicine for their supposed beneficial effects on health, specially during the postpartum period.

Currently, there is an increasing demand for information from women who want to know the different alternative uses of the placenta and its possible positive effects.

The objective of this research is to increase knowledge about possible beneficial effects of placentas and their different applications after the delivery.

Materials and Method

Bibliographic research of scientific articles published in health sciences databases and websites.

Results

Several laboratory animal investigations have been performed, but there are very few studies in humans, which most of them are poor, and the majority of them are about the beneficial components of the placenta and the possible beneficial effects of placentophagy on the new mother´s health. It is suggested that the ingestion of placenta facilitates women´s postpartum recovery (decreased anemia, uterine involution, postpartum depression, etc).

Conclusion

It would be interesting to carry out further investigation over placenta´s different applications.

The Clinical Application would be to respond to the need for information of population about this matter and to know placenta´s possible uses.

Key words: Placenta, Complementary Therapies, Homeophaty

Presenter name: Goretti González

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Is vaginal birth of dichorionic diamniotic (DCDA) twins still safe? A 10-year retrospective study in a Teaching Hospital in London

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Introduction

The objective of our study was to determine if vaginal birth of DCDA Twin pregnancy is still a safe option especially in the light of the fact that introduction of the European Working Time Directive (EWTD) in the United Kingdom may have had an adverse impact on the skills and experience with practical procedures such as internal podallic version (IPV), assisted vaginal breech deliveries, breech extraction and operative vaginal deliveries. In addition, even after a successful vaginal birth of the first twin, there is an increased risk of fetal distress, umbilical cord prolapse, placental abruption which may lead to an emergency caesarean section for the second twin.

Materials and Method

Data on twin pregnancies were obtained from our electronic Maternity Data System (Euroking) for a 10 year period (2000-2010). Retrospective review of individual Maternity Case Notes was carried out by investigators and data was entered into the Exel Spreadsheet. All patient identifiable data were excluded.
A total of 892 maternities with Twin pregnancies were identified during the 10 year period. All monochorionic twins and triplets were excluded from the analysis as they underwent a planned, elective caesarean section as per our local protocol.

Results

Out of 892 maternities with Twin pregnancies between 2000-2010, out of 1778 babies, there were 1750 live births and 28 were stillbirths.
474 women (52%) attempted vaginal delivery and 48% were delivered by a planned, elective caesarean section due to maternal and/or fetal indication. These included malpresentation of the first twin, evidence of intra-uterine growth restriction (IUGR), major degree placenta praevia or a co-existing maternal condition such as pre-eclampsia that necessitated a planned, elective caesarean section.
Out of 474 women who attempted a vaginal birth, successful unassisted vaginal birth of both first and second twin was achieved in 220 women (46%). Operative vaginal birth (vacuum extraction or a forceps delivery) was performed in 89 women (19%) and 165 women (35%) had an emergency caesarean section.
Out of 165 emergency CS which were performed for twins, 85 women were admitted in spontaneous onset of labour and 48 had induction of labour and 32 women had EmCS due to other reasons such as abnormal dopplers and maternal conditions such as worsening pre-eclampsia that necessitated urgent delivery. Majority of women who had an emergency caesarean section were primigravidae (62%) with the mean age of 31 years (range between 16 to 46 years). 68% of were performed at the gestation after 34 weeks, predominantly for failure to progress, abnormal CTG and maternal medical conditions. In contrast, common indications for emergency caesarean sections performed below 32 weeks were abnormal dopplers, IUGR and preterm labour with abnormal lie of the first twin.
Out of 35 emergency caesarean section which were performed for the second twin, 75% were performed for suspected fetal compromise (42%) and abnormal lie (32%) and only 2 babies had umbilical cord prolapse. In cases where the second twin had an emergency caesarean section, 78% of first twins were spontaneously delivered.

Conclusion

Our 10-year experience has shown that successful vaginal birth could be safely achieved in 82% of twins who attempt a vaginal delivery. Out of 454 women who attempted a vaginal birth, only 35 women (7%) had an emergency caesarean section after the delivery of the first twin. Abnormal lie, suspected fetal compromise and failed instrumental vaginal delivery were the commonest indications for the emergency caesarean section of the second twin after a successful vaginal delivery of the first twin.
Therefore, improvement of CTG Interpretation by continuous training of all staff in fetal monitoring and Hands-on Training on internal podalic Version (IPV) and operative vaginal deliveries may help in further reducing the emergency caesarean section rate for the second twin. Our maternity unit has a 'Hands-on' training on operative vaginal births and currently has the lowest reported failed instrumental delivery rate

in the UK. This may explain our lower failed instrumental vaginal birth rate for both first and second twins observed in our study.

Improvement of CTG interpretation to reduce operative delivery for suspected fetal compromise and to reduce false positive rate of CTG for intrapartum hypoxia may also help reduce intrapartum caesarean section rate. In our unit to improve CTG interpretation we were the first maternity unit in the UK to introduce a mandatory competency testing on CTG in 2010 and have seen a 50% reduction in our emergency caesarean section rate since 2011. Therefore, it is likely that improvement of CTG interpretation also would reduce unnecessary operative interventions of the second twin.

Key words: Twin delivery, mode of delivery of second twin, internal podalic version.

Presenter name: Ewelina Rzyska

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THE RESULTS OF ANTENATAL ADMINISTRATION OF MAGNESIUM SULPHATE AS NEUROPROTECTIVE DRUG AND FOLLOW UP PSYCHONEUROLOGICAL DEVELOPMENT OF PREMATURE CHILDREN, EXPOSED TO ANTENATAL TREATMENT WITH MAGNESIUM.

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Introduction

To determine a neuroprotective effect of antenatal administration of MgSO4 and to emphase the psycho-neurological development of premature children treated with magnesium sulphate as antenatal neuroprotector at the age of one year.

Materials and Method

In this study were included 291 pregnant women, with monofetal pregnancy in gestational age from 26+0 till 33+6 weeks of gestations, who delivered till term of 34+0 weeks of gestation, which were divided into 2 groups. In first group in 122 cases had been administrated neuroprotective theraphy with MgSO4 (sol. MgSO4 25% - 20,0ml + sol. NaCl 0,9% -20,0 ml in bolus time of 15 min (slowly, i/v), with continuing perfusion sol. MgSO4 25% - 20,0ml + sol. NaCl 0,9% -200,0 ml. In the second group in 169 cases, after the same scheme we perfused NaCl as placebo after the same scheme. Till the first year of life the premature children were included in follow up program. We had examined neurological status of premature children at 3 and 12 month of correctional age. In the first group we included 122 of premature newborns and in the second placebo 169 newborns had been examined. The methodology of research has included theoretical, practical and statistical methods of investigation.

Results

The early neurologic adverse outcomes occurred significantly less frequently in the magnesium sulfate group in comparation with placebo group(1.9% vs 3.5%; relative risk, 0.55; 95% confidence interval [CI], 0.32 to 0.95). Neurological diagnostics included: periventricular hemorrhage – 18 children (10,60%) and convulsive syndrome – 4 children (3,2%) for placebo group and 7 children (4,1%) with periventricular hemorrhage and 4 children (2,4%) with convulsive syndrome for the MgSO4 group. The analysis of the structure of neurologic abnormalities, identified by dynamic evaluation within 12 month of life of premature newborns, which were administrated magnesium sulphate as antenatal neuroprotection, stipulated: major neurologic deviations - 28,9±2,4%, moderate neurologic deviations – 28,9±1,2%; minor neurologic deviations – 13,5±1,3%; psychomotorial development related to corrected age – 45,3±4,5%. Children prematurely borne from first MgSO4 group at the age of 12 month presented high neurologic risks in 13±1,4% of cases (t-3,6; $p<0,001$), and those of second placebo group: 20,8±1,9% (t-4,7; $p<0,001$). Neurologic moderate risks in first study group, at 12 month of life, were 12,5±1,2% (t-6,3; $p<0,001$), and in second control group - 25±1,5% (t-8,8; $p<0,001$).

Conclusion

The analysis of structure of neurological abnormalities determined by dynamic evaluation at 12 month of life of prematurely borne children with the gestation period less than 34 weeks, which where administrated magnesium sulphate for antenatal neuroprotection and placebo, demonstrates at the children of second control placebo study group a higher rate of neurologic minor and major deviations comparing with first study group.

Key words: premature birth, psychoneurological development, magnesium sulphate, neuroprotective drug
Presenter name: Lupascu Aliona

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Using the fetal electrocardiogram analysis in prolonged gestations: a comparison with conventional cardiotocography. Preliminary results.

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Introduction

Oxygen deficiency affects fetal brain and fetal heart in the same way. So, the information from the myocardium is an indirect measurement of the fetal brain oxygenation during labor.

The purpose of this study is to compare this two fetal monitoring methods (fetal ECG and conventional cardiotocography) to determine if there are differences in maternal and perinatal outcomes.

Materials and Method

A randomized study was performed with two arms: in group 1 we used conventional cardiotocography (CTG) and in group 2 we used CTG plus fetal electrocardiogram (STAN31). We included 186 pregnant women with prolonged gestation (>=290 days of gestation) admitted to Virgen de Las Nieves University Hospital (Granada) from January 2013 to February 2015. The inclusion criteria were: singleton fetus in cephalic presentation, not previous cesarean section, >=290 days of gestation and prior normal CTG at least 30 minutes.

Results

97 patients were assigned to the CTG group and 89 to the STAN group. Some losses occurred in group of fetal electrocardiogram, due to problems picking up the signal of the cephalic electrode, or it was not placed (the patient refused to participate in the study into the labour ward, failure of labor induction, arrival to labour ward in advanced second phase, or other reasons). Finally 56 patients for electrocardiogram group were included.

No significant differences between groups were found in days of gestation and initial Bishop index on first day of induction. Labor was induced in 97,3% of the patients. We found an higher percentage of spontaneous deliveries in CTG group (53,61% vs 47,19%), while cesarean and instrumental deliveries were lower (25,77% vs 28,09% and 20,62% vs 24,72%, respectively). Indication for ending labor due to fetal distress was higher too in STAN group for cesarean section (8,99% vs 2,06%), but in instrumental deliveries was lower (8,99% vs 9,28%). The differences was not statistically significant. Blood gas values (pH and base deficit) in the umbilical cord artery and vein at birth was similar between CTG and ECG group. More newborn of ECG group were admitted in minimal neonatal care (22,5% vs 17,5%, no statistically significant). Days of neonatal and puerperal admission were similar in both groups.

Conclusion

Studies have shown that using STAN decreases the number of operative deliveries and acidemia at birth, but our results do not demonstrate it in prolongued gestations, and other improvement in pregnancy outcomes.

Key words: electrocardiogram, cardiotocography, prolonged gestations

Presenter name: Javier Góngora Rodríguez

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EVALUATION OF THE QUALITY OF CARE DURING ACTIVE SECOND STAGE OF LABOR : CASE CONTROL STUDY ABOUT 81 CASES OF METABOLIC ACIDOSIS COMPARED TO 81 CONTROLS

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Introduction

Birth asphyxia is a rare event but sometimes associated with neurological impairement in infancy. The study compare fetal heart rate (FHR) before and during pushing efforts and the quality of care during active second stage following the French guidelines in a group of metabolic acidosis and healthy children. The aim is to determine the responsibility respective of these elements in the arisen of metabolic acidosis.

Materials and Method

We have identified 81 normal fetuses at term delivered vaginally presenting an umbilical arterial pH ≤7.00 or base excess ≥12 mmol/L or lactate ≥11 mmol/L. The 81 healthy controls chosen were the vaginal birth before the case of metabolic acidosis. A blinded to outcome experts' review estimated the quality of care during active second stage of labor through an interpretation of FHR 45 minutes before and during pushing efforts and predicted neonatal outcomes. The experts used French classification called CNGOF with five-tier classification and FIGO classification with three-tier classification. Multivariable logistic regression models were used to determine combinations at greater risk.

Results

Care wasn't considered optimal in 41% of cases compared to 16% of controls (p0.001). Cases had a significant increase in FHR abnormalities before expulsion (72.8% versus 32%) and during pushing efforts (80.1% versus 37%). Decrease variability is the most specific FHR abnormality in metabolic acidosis (82.1%) whereas the presence of decelerations had the strongest sensitivity (70.3%). In half of the cases (48.8%) experts' review did not predict correctly metabolic acidosis. The predictive ability of FIGO classification to identify metabolic acidosis is better than CNGOF classification. Non-reassuring fetal status before pushing efforts is the most important factor involved in the onset of metabolic acidosis in the multivariable analysis. An abnormal FHR before active second stage of labor associated with a substandard care is the combination most at risk of birth metabolic acidosis (OR 4, 95% CI 1.23-12.95).

Conclusion

Metabolic acidosis is associated with a higher rate of substandard care and FHR abnormalities, but FHR is limited do detect metabolic acidosis at birth. Both, FHR status before pushing and the variability of FHR before and during pushing are critical parameters in metabolic acidosis cases.

Key words: FHR abnormalities, metabolic acidosis, substandard care, pushing efforts

Presenter name: C. Vayssiere

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ADNEXAL MASSES IN PREGNANCY: A CHALLENGE DIAGNOSIS

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Introduction

The routine use of prenatal ultrasound for evaluation of the fetus has led to an increased detection of adnexal masses in pregnancy. The majority of these are ovarian in origin and although nearly all are benign, the possibility of malignancy must be considered.

Materials and Method

A case is reported.

Results

The authors reported a case of a 32 years-old primigravida, attended in our Department because of a posterior fibroid with 72 x 50 mm. The pregnancy was unremarkable until 28 weeks, when a second adnexal mass was identified adjacent to the described fibroid. It had 100 x 88 x 70 mm, thickened wall, dense internal echoes and areas of papillary projections. Magnetic resonance imaging was performed for further evaluation and revealed the two masses, one with fibroid features, and the other with a cystic appearance, thickened wall, irregular contours and heterogeneous septa, being the hypothesis of ovarian mass the most probable diagnosis. Given the risk of malignancy, a caesarean section and an exploratory laparotomy were performed at 34 weeks and two voluminous subserosal fibroids were found. Definitive anatomopathological study confirmed the extemporaneous examination.

Conclusion

Fibroids are the most common solid masses in pregnancy, affecting 1.4% of gestations. Despite typical sonographic characteristics of fibroids, subserosal masses with cystic degeneration can present with variable patterns rising diagnostic challenges. Even though magnetic resonance is helpful in differential diagnosis, in this case, it suggested a suspicious ovarian mass leading to early intervention.

As shown in this case report, fibroids can represent a challenging diagnosis. The knowledge of possible differential diagnosis and their imaging features are important in the management of suspicious masses during pregnancy.

Key words: Adnexal masses; pregnancy; sonography; magnetic resonance imaging

Presenter name: Rosália Coutada

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EARLY NEONATAL DEATH AT TERM: IS IT RELATED ONLY WITH INTRAPARTUM CARE ?

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Introduction

Good quality intrapartum care is crucial for both mothers and their infants, and where appropriate and timely care is provided, most maternal and neonatal deaths can be prevented (WHO et al., 2010). Quality intrapartum care is directly related to The fourth Millennium Development Goal (reduce child under-5 child mortality by two-thirds by 2015) and Fifth (improve maternal health). This indicator focuses on the intrapartum and very early neonatal deaths that could have been averted by the health system's ability to provide quality obstetric care and neonatal resuscitation.Objective: to determine if early neonatal death is only due to insufficient intrapartum care.

Materials and Method

we examined 106 early neonatal deaths (END) at term, as a part of perinatal confidential audit, which took place in Republic Moldova in different settings during 2006-2009. Moreover, verbal autopsy interviewers conducted standardized interviews with 38 women, newborns of whom died during first 7 days of life.

Results

According to the perinatal confidential audit data the intrapartum care in case of END was thought to be optimal in 11,3 % of cases (n=12), appropriate in 42,5 % (n=45), insufficient in 23,6 % (n=25) and there was insufficient data in 22,6% cases. Such conditions as asphyxia, anoxia and trauma were the leading cause of END in 51% of cases, being followed by retention of fetal intrauterine growth (17%), congenital malformations (14 %), maternal-fetal disorders, such as preeclampsia, severe extragenital disorders, isoimmunization, in 7% cases, infection (6%) and others (5%). Of 30 cases, resolved by caesarean section, only 50% were done during first 30 minutes after decision, as recommended by WHO. Out of 25 births, stimulated by oxytocin, followed by END, only 36 % were conducted in accordance with the existing national guideline for the use of oxytocin.

According to the verbal autopsy 92 % of women were satisfied by the quality if intrapartum care. The remained 8% (3 women) were unsatisfied both by intrapartum and postpartum care.

Conclusion

Early neonatal death it is not always related with intrapartum care. Thus, Audit Committee experts have determined that in more than half of the cases (53, 8 %) intrapartum care was satisfactory. This is confirmed by the opinion of the mothers, in most cases remained satisfied by the intrapartum care, even despite of the death of their child in first 7 days of the life. However, there are several significant gaps in intrapartum care, modification of which could influence the intrapartum and early neonatal mortality rate.

Key words: intrapartum care, early neonatal death, perinatal confidential audit

Presenter name: Aliona Lupascu

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Using the birth ball for pain relief during induction of labour

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Introduction

Birthing balls have been used for years to properly exercise and rehabilitate patients in physical therapy.The birthing ball has now found a new home in birthing centers and labour wards across the country. This tool can be effective for pain relief during labor and childbirth besides a few more beneficial effects during labour.

Materials and Method

The study was performed at Gregorio Marañón Hospital birth centre. A Randomised Clinical Trial comparing the two methods of pain relief in inducction labour was carried out.

In order to accomplice the study, we chose 20 primiparous women in the first stage of labour after being induced. They were allocated in two study groups by a randomised block design. One of them used the birth ball as a pain relief method,and the other one used pethidine and haloperidol injection.

Results

Women who asked for pain relief during the first stage of labour, were asked by their midwives about pain perception and this was reflected on the the VAS – Visual Annalogical Scale – from 0 to 10-pain score scale. According to the study group they were included in, they received either a birth ball or a subcutaneous pethidine and haloperidol injection. 30 minutes post intervention, the midwife asked again about their pain perception and registered it again in the VAS scale.The experimental group had a pain relief score of 2 according to the VAS scale, in comparison to the control group which had only 1

The experimental Group of women who used birth balls had shorter first-stage labour duration (X=11h and x=13.5 h) and less need for further pain relief in comparison to the control group which required more pain relief and had a longer first stage.

Conclusion

Clinical implementation use of thebirth ball exercises during first stage of labour could be an effective tool to reduce pain and delivery time for women during induced labour.

Key words: birth ball,pain, pain relief, non pharmacologic tool, first stage,delivery labour.

Presenter name: E. González

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ANALYZING PROBABLE CASES OF PREVENTABLE CESAREAN DELIVERY – ARRESTED LABOR AND FAILED LABOR INDUCTION.

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Introduction

Labor arrest and failed induction are the major indications for primary cesarean delivery during labor. The criteria to diagnose first stage of labor arrest during active-phase have been updated. They consist in the failure of labor progress in women with at least 6 cm of dilatation with ruptured membranes despite 4h of adequate uterine activity, or at least 6h of oxytocin administration with inadequate uterine activity and no cervical change. In case of epidural analgesia, labor may last longer. On the other hand, the criteria to diagnose of failed labor induction is failed attempt to generate regular contractions and cervical change after at least 24 h of oxytocin administration, or 12 hours with artificial membrane rupture.

When the current priority is to reduce the cesarean rate, it is crucial to analyze these failed attempts of vaginal delivery and if the criteria used are very different from the criteria recently suggested.

Materials and Method

Retrospective observational study of all pregnant women admitted in our service from January to December of 2013, with simple gestation at term (> 37 weeks), in which a cesarean associated to the diagnosis of dystocia, obstructed labor or failed labor induction was performed. All cases with nonreassuring fetal tracing, fetal macrosomia or cephalopelvic disproportion were excluded. We analyzed the demographic characteristics of the population (age, parity, prior cesarean) and factors related to medical performance during labor conduction (indications for labor induction, labor analgesia, rupture of membranes, time of oxytocin administration, time of expectant attitude in the same cervix dilatation before deciding cesarean delivery, and if this was done in latent - < 4 cm - or active phase of labor - >= 4 cm dilatation).

Results

A total of 48 cases were analyzed: 27 cesareans because of arrested labor and 21 due to failed labor induction. In arrested labor, practically every cesarean were performed at active phase (96%, n=26) and all women had already ruptured membranes. The mean time of oxytocin administration was 06h15m hours and the mean time of expectant attitude was 03h00m. When analyzing failed induction of labor, in one third of cases there was no oxytocin administration at all and in all other cases, the mean time of administration was 08h00m. Only 33,3% of women had ruptured membranes (n=7) and in these cases 57% had oxytocin administration (n=4) during a mean time of 05h45m.

Conclusion

Most cesareans are performed because of arrested labor or failed labor induction. However, our service has a low rate of cesarean deliveries with these indications. The performance at diagnosing arrested labor seems correct: the time of oxytocin administration and expectant attitude were consistent with the ones recommended in guidelines. However, when diagnosing failed induction it looks like the criteria are not coincident.

Key words: cesarean delivery; arrested labor; failed labor induction

Presenter name: Lara Caseiro

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Assessment of obstetric bleedings structure and rate in Ukranian Perinatal Centre

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Introduction

Obstetric hemorrhages (OH) contribute a big deal in maternal mortality. Incidence of labours complicated by OH ranges from 4 to 12%. Perinatal centers which have been open for last 5-10 years in order to provide high quality care for the Ukrainian female population have reduce incidence of OH significantly in many regions of Ukraine. Undoubtedly implementation of active management of the third stage has proven to be the most effective preventive method.

The aim of the study was to assess incidence and causative structure of OH in Kharkiv regional perinatal center (KRPC) for the last 4 years.

Materials and Method

We followed every case of labour complicated by OH which had taken place in KRPC during the period 2011-2014 using clinical, laboratory, instrumental and statistical methods.

Results

As a result it was found that the number of births in the KRPC ranges 3112 ± 256 deliveries per year. Normal delivery ranges from 58 to 61%. Such a low value may be explained by the fact that a lot of pregnant women with already complicated pregnancy or chronic diseases had been referred here from all over the region (population of Kharkov region is around 2 millions). Incidence of preterm labours has constituted 10,3 ± 2,4%. The rate of caesarean sections (CS) has declined slightly for these 5 years (from 30.4% to 21.2%), but still remains quite high due to the above-mentioned accumulation of high-risk pregnant women. The main indications for CS were malposition (mainly breech presentation), fetal distress, fetal-pelvic disproportion, chronic maternal diseases requiring to exclude bearing down. CS rate due to OH (placenta previa, abruptio placentae) constituted 5,4 ± 0,9%.

OH fluctuates within 2,1-2,9%, which is 64 - 78 cases per year. The main causative factor is placenta abruption (76.6%), next ones are placenta previa (12.5%), hypotonic bleeding (18.1%). Considering significant reduction in hypotonic bleeding incidence in KRPC for the last four years from 39.6% to 6.5%, we confirmed preventive role of active management of the third stage of labor with oxytocin. Also the use of misoprostol (rectal 800mg) and modern surgery options (B-Lynch suture, devascularization, ligation of internal iliac arteries and others.) contribute substantially in decline of maternal mortality due to OH and result in reduce of hysterectomies in women of childbearing age.

Conclusion

Thus, assessment of medical assistance in Ukrainian perinatal center showed significant reduction in obstetric bleedings rate (especially hypotonic) and hysterectomies owing to the active management of the third stage of labor and reproduction-conserving surgeries

Key words: hypotonic obstetric bleedings, Ukranian perinatal centre

Presenter name: V. Lazurenko

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HIGH RISK PREGNANCIES IN PATIENTS WITH CIRRHOTIC PORTAL HYPERTENSION AND THE SAVE MODE OF DELIVERY.

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Introduction

Pregnancy is uncommon in patients with cirrhotic portal hypertension (CPH), because the conception is rare and these women have often anovulatory cycles. In some conditions this patients become pregnant. Moldova is an endemic country for viral hepatitis.The most dangerous complication of CPH is bleeding from the esophageal varices (EV). The aim: To prevent and to stop bleeding from esophageal varices(EV), by endoscopic band ligation (EBL) during pregnancy. In base of results, to try to elaborate an optimal algoritm of labour for this group of women.

Materials and Method

The subjects of the present study were three cases of pregnant women (mean age-30.3±1.4) with posthepatitis (HCV, HBV) liver cirrhosis and high-risk EV (F3, RCS+++). Severity of liver disease was classified: A/B/C-1/1/1, the mean(s.d.) score on admission was 6/10/12(9,3). EBL has been carried out with MBL-6 or MBL-10(Wilson-Cook®, Winston-Salem, NC, USA). EBL was performed at 27,6 ± 4,2 weeks gestation.

Results

Characteristics of EBL were: total sessions-3, mean(s.d.) rubber band consumption-4.3(0.8). The complete EV eradication (F0, RCS-) was obtained in all patients with zero episodes of EV bleeding. The patients underwent delivery by cesarean section in two cases (n=2) and per vias naturalis in one case (n=1), with an elective-assisted second stage. There was 1 maternal death in the postpartum period due to fulminant hepatic failure.

Conclusion

Treatment of EV during pregnancy is a rare and serious clinical dilemma especially in endemic zone. Initial experience demonstrated that EBL appears to be a useful treatment for pregnant women with EV. The mode of delivery is based on case-by-case principles. If eradication of varices is completed before term, may be allowed vaginal one, with an elective-assisted second stage, in apsence of obstetrical complications. For patients with high risk EV an elective cesarean section should be offered as a mode of delivery. In case of deterioration of hepatocellular function in pregnant women with PH, the outcomes may be catastrophic for mother and baby.

Key words: cirrhotic portal hypertension (CPH), esophageal varices (EV),
Presenter name: Lupascu Aliona

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fetal lactate sensor

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Introduction

In the developed world, it can be estimated that 80% of labours are continuously monitored with electronic fetal monitoring (EFM). Since the beginning of EFM there has been an escalation of operative and instrumental deliveries – in USA now every third pregnancy ends in a caesarean delivery. Increased C-section rates are not associated with a lower incidence of birth asphyxia [1], and lead to a 100% increase in healthcare costs for obstetrics [2].

1. The Cochrane Database of Systematic Reviews 2006 Issue 3
2. New York Times 30 June 2013

Materials and Method

We developed a lactate biosensor incorporated into a fetal ECG electrode that provides instantaneous continuous readout of lactate. This approach may provide continuous monitoring of fetal oxygenation and can be used as an adjunct to EFM. Gold plated fetal ECG electrodes were modified to enable lactate measurement. The electrode was coated with a perm-selective layer to prevent oxidation of compounds other than H_2O_2. The protected electrode is coated with an enzyme that converts lactate to H_2O_2 (lactate oxidase).

Sensors were calibrated in vitro in a stirred beaker. By adding consecutive concentrations of lactate, currents measured at 600 mV vs a Ag/AgCl reference electrode showed good concentration dependence. Sensor sensitivity and linearity could be modified by modification of thickness of enzyme layer and concentration.

Results

We transiently deoxygenated 5 isoflurane anesthesized rats while monitoring oxygenation on the tail by an pulse oximeter. Upon shaving, sensors were implated on in the skin of the back of the animal. After obtaining stable currents from the implanted sensors, the animal was transiently deoxygenated by increasing nitrogen and decreasing oxygen. We measured an increase in lactate concentration in the subcutaneous tissue after deoxygenation of the rat.

Conclusion

- Lactate can be quantified in subcutaneous tissue of the Rat
- Lactate increases upon transient deprivation of of oxygen
- Coating of a gold plated fetal ECG electrode with Lactate oxidase provide a lactate sensitive sensor
- Linearity and sensitivity is dependent on thickness of layers applied
- This lactate sensor can be used to monitor [Lactate] subcutaneously in vivo

Key words: fetal lactate sensor, fetal intrapartum monitoring, oxygenation

Presenter name: P. van den Berg

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MATURATION OF THE CERVIX WITH MIFEPRISTONE AND MISOPROSTOL IN CASE OF INTRAUTERINE GROWTH RETARDATION SYNDROME (IUGRS) TILL 37 WEEKS OF GESTATION

Lupascu Aliona

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Introduction

In order to prevent perinatal morbidity and mortality it is sometimes necessary to induce labor, particularly in case of IUGRS. For a successful vaginal delivery path it is necessary to have the basic condition - the presence of "mature" cervix. If we don´t have this condition, than appear the question which is the method of cervical ripening. Currently, there are different ways that contribute to the maturation of the cervix. However, they do not always give the desired result, which determines the need for new, effective, pathogenetic methods. Objectives: Evaluation of the effect of mifepristone and misoprostol for cervical ripening (by Bishop scale) in pregnant women with intrauterine growth retardation till 37 weeks of gestation.

Materials and Method

In prospective study were included 164 women with IUGRS, which in dependence of the method of cervix preparation, were divided into 2 groups: I (basic) - 82 patients, whom had been appointed mifepristone (400 mg peroral), II (comparison) - 82 patients whom have been appointed misoprostol (50 mg sublingual). Groups of patients were omogene for comparation.

Results

Till the administration of the drugs in both groups cervical length was observed in 100% of cases ≤ than 5 points by Bishop scale. In 24 hours after drug administration the situation of the cervix have been changed. In the basic group ripe cervix (≤ 8 points) was 48.78% and in the comparison group 63,41% (RR 0,75, 95% CI 0,55 to1, 01 p <0,05). After 48 hours: mature cervix- 87.8% in the basic group, in comparison group - 67,07% (RR 2,10, 95% CI 1,21 to 3,64, p <0,001).

Conclusion

In our study we observed that Mifepristone 400 mg is more effective than Misoprostol 50 mg in maturation of the cervix in case of IUGRS till 37 weeks of gestation.

Key words: Mifepristone, Intrauterine Growth Retardation Syndrome (IUGRS)

Presenter name: Lupascu Aliona

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Managing refractory postpartum haemorrhage - Beyond obstetric hysterectomy

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Introduction

Postpartum haemorrhage (PPH) remains a leading cause of maternal mortality. Management of PPH involves use of nonsurgical methods followed by invasive and surgical methods in case of continued bleeding together with transfusion therapy. We present a challenging case of continued bleeding after an obstetric hysterectomy with normal clotting profile. Our aim is to share our experience and review the management options available in case of persistent bleeding following obstetric hysterectomy.

Materials and Method

Case report

Results

A multiparous patient was induced for pre-eclampsia at term. She had an emergency caesarean section with a massive haemorrhage of 4 litres. Massive haemorrhage protocol was activated and medical interventions with uterotonics were used for control of bleeding along with transfusion therapy. In view of rapid and major bleeding a decision was made to proceed for obstetric hysterectomy. An obstetric hysterectomy was performed by 2 consultant obstetricians and haemostasis was achieved. She was transferred to ITU. Her observations and clinical condition were not improving. Her clotting profile remained normal with no evidence of DIC. On imaging intraperitoneal bleeding was noted. Interventional radiology did not demonstrate a bleeding vessel and hence embolization was not a safe option. She had a laparotomy with both the obstetrician and general surgeon present. A litre of haemoperitoneum was noted with no obvious bleeding point identified. In view of extensive oozing, pelvic cavity was packed. She had another return to theatre for removal of packs. At this time, arrangements were made to use fibrin sealant available, if required. The bleeding had settled and fibrin sealant was not required. She has made excellent postoperative recovery.

Conclusion

Persistent bleeding following obstetric hysterectomy is most commonly related to clotting abnormalities. Management should be closely liaised with the haematologist. Blood, blood products and clotting factors are used according to requirements. In our patient, clotting profile remained normal.

The option of interventional radiology should be considered. Following obstetric hysterectomy uterine artery embolization is obviously not the option of choice. Embolisation can be used if a bleeder is identified. It may not suitable in case of generalised oozing which was present in our case. Use of recombinant activated factor VII (rFVIIa) has been reported in managing intractable PPH. It can be associated with risk of thromboembolism especially in patients with risk factors. Packing of the pelvic cavity is an alternative, which was used in our case. It is important to be familiar with the technique as the procedure is rarely performed. It does involve a return to theatre for removal of the packs. Fibrin sealants have been reported to have been used successfully in managing postpartum bleeding. These products may not be routinely available in obstetric theatres.

Refractory bleeding following obstetric hysterectomy is a rare and challenging situation. Seeking help and involving a multidisciplinary team in the management is of paramount importance. Awareness of further management options will assist the obstetric team in management.

Key words: postpartum haemorhage, packing, fibrin sealant

Presenter name: R. Gada

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Contemporary review of extraperitoneal approach for caesarean section

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Introduction

Caesarean section is a common obstetric procedure performed worldwide. Majority of the caesarean sections are now performed using a transperitoneal approach. Although the mortality from these procedures has significantly reduced, reducing the morbidity associated with postoperative pain, adhesions and infection remains a challenge. In the pre-antibiotic era, the extraperitoneal caesarean section was thought to reduce the morbidity and higher mortality of classical transperitoneal approach by protecting the peritoneal cavity. The extraperitoneal approach has since been modified to simplify the approach and reduce complications. The review seeks to evaluate available evidence comparing the extraperitoneal and transperitoneal approaches for caesarean section.

Materials and Method

A PubMed and Medline search was performed using the keywords ‘caesarean section’, ‘extraperitoneal approach’ and ‘transperitoneal approach’. Clinical studies and randomised control trials available in English language were included in the review.

Results

8 clinical studies and 1 randomised control trial were available for review. Of the 8 observational studies the two operative techniques were directly compared in 3 studies.

Overall extraperitoneal caesarean section was reported to be associated with significantly better postoperative recovery with reduced pain scores, early return of gastrointestinal function and early mobilisation. The procedure was also associated with less blood loss and reduction in postoperative febrile morbidity. There was no significant difference in intraoperative complications and neonatal outcomes between the two groups. Overall the operative duration was shorter in the extraperitoneal group. The observational studies reported longer mean incision to delivery time using the extraperitoneal approach; however, the RCT did not support this finding. The reported incidence of inadvertent opening of peritoneal cavity during the procedure ranged from 8 to 11%.

Conclusion

Based on current evidence, extraperitoneal approach for caesarean sections is associated with less perioperative morbidity and better postoperative recovery without increasing risk of complications. Extraperitoneal Caesarean section procedure deserves reconsideration in the modern era and can provide an alternative to traditional transperitoneal approach for caesarean section.

More randomised control trials recruiting larger patient numbers are required to establish the short and long term outcomes and repeat caesarean sections using this technique. Also, more training is required to ensure that obstetricians can develop and maintain their skills at performing this procedure.

Key words: caesarean section, extraperitoneal, transperitoneal

Presenter name: R. Gada

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EARLY TERM DELIVERY SPONTANEOUS VERSUS INDUCED: MODE OF DELIVERY AND NEONATAL OUTCOMES

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Introduction

Early term (37 weeks- 38+ 6 days) deliveries can be spontaneous or induced. Regardless of onset labor be spontaneous or induced, early term delivery is associated to higher neonatal complications when compared with deliveries after 39 weeks. Therefore induction of labor in early term it is only justified by the occurrence of maternal or fetal complications.

Materials and Method

Retrospective study of singleton pregnancies, with delivery between 37 weeks and 38 weeks + 6 days of gestation occurred in CHAA during 2013. Two study groups were defined: Group 1 (spontaneous) and Group 2 (induced with prostaglandins). 43 cases, where were a medical indication for pregnancy termination associated with the need for elective cesarean section (as previous cesarean section, fetal presentation anomala, placentation anomalies), have been excluded. Then it were compared several variables, such as, gestational age, mode of delivery, indication of cesarean section in labor and neonatal outcomes. The data were analyzed using SPSS 22.0®.

Results

In this study, the labor was spontaneous in 82.2% (n=442) of the cases while 17.8% of pregnant women (n=96) were undergoing induction of labor with prostaglandins. Gestational mean age in both groups was 38 weeks. The cesarean rate in group 1 and group 2 were 15.8% and 24%, respectively (without statistically significance). In group 1 the most frequent cesarean reason was “other” (pelvic presentation, two previous caesarean sections and maternal pathology that contraindicate vaginal delivery) while in group 2 the most frequent reasons were dystocia and suspected fetal hypoxia, with statistically significant differences. Regarding to neonatal morbidity, there are no statistically significant differences in the number of newly born who were hospitalized in neonatology and the mean duration of hospitalization in this service.

Conclusion

There were no statistically significant differences in the delivery mode between the two groups, although there were differences regarding the reasons cesarean. The neonatal complications, especially respiratory and metabolic were frequent, so the induction of labor should only be considered in selected cases of maternal-fetal pathology.

Key words: EARLY TERM DELIVERY, SPONTANEOUS, INDUCED
Presenter name: Sílvia Alves Torres

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Delayed interval delivery of twin two in DCDA pregnancies

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Introduction

Delayed interval delivery (DID) is a relatively new term used to describe the delivery of the second fetus after the premature delivery of the first fetus in a multiple pregnancy. It is a controversial topic in Obstetrics, with an increasing number of case reports and studies describing it. (1)

With increasing maternal age and assisted reproductive techniques, the incidence of multiple pregnancies has noticeably increased. Multiple pregnancy is associated with an increased risk of preterm delivery, which can lead to an increased risk of neonatal morbidity and mortality.

DID of the second fetus could potentially prolong pregnancy for a sufficient amount of time to achieve good prognosis. (2) However delayed delivery could lead to an increased risk of sepsis, thus leading to an increase in maternal and neonatal morbidity.

We present two cases in contrast to one another, from a tertiary hospital in London, with good and bad outcomes from DID for the second twin in DCDA pregnancies.

Materials and Method

Not applicable.

Results

second twin in DCDA pregnancies.

Case 1

A 41 year old female presented at 21 weeks gestation with per vaginal bleeding on a background of an IVF (In vitro fertilisation) DCDA pregnancy. Initial investigations showed normal white cell (WCC) and c-reactive protein (CRP) count. Six days following her admission however, she underwent preterm rupture of membranes at 22 weeks gestation, followed by the miscarriage of twin 1. The umbilical cord was ligated with silk sutures at the level of the external cervical os. Ultrasound after 48 hours showed normal growth velocity, amniotic fluid volume and umbilical dopplers in Twin 2 and a closed cervix. Antenatal steroids were administered at 23 weeks and she was discharged with twice weekly visits to the Maternal Fetal Assessment Unit. The patient was re-admitted at 27 weeks with rising inflammatory markers observed during her weekly visits. IV antibiotics were commenced and a plan to expedite delivery by emergency caesarean section was made. Prior to delivery, magnesium sulphate was given and twin 2 was delivered with APGARs of 3, 8 and 8 and weighing 1050grams. Both mother and baby made an uncomplicated recovery.

Case 2

A 40 year old female presented with painless per vaginal bleed at 22+ weeks. A speculum examination revealed bulging membranes and cervical dilatation. Admission blood tests revealed normal inflammatory markers and the patient was admitted for monitoring. Antenatal steroids were given at 23 weeks, however at 24 weeks, the patient had a premature rupture of membranes (PPROM). Erythromycin was commenced with close monitoring of infection. The patient became pyrexial 48 hours after PPROM with raised inflammatory markers. Broad-spectrum antibiotics and magnesium sulphate were given and spontaneous vaginal delivery of twin 1 followed, with APGARs of 6, 9, 10, weighing 470grams. Cord was ligated and per rectal progesterone was re-commenced with close monitoring of inflammatory markers on an out-patient basis. One week following delivery of twin 1, the patient developed severe sepsis and labour was induced with syntocinon. Twin 2 was delivered vaginally with APGARs of 1, 7 and 8 and a weight of 570grams. The patient made a good post-natal recovery. Although twin 1 made good progress and is stable, twin 2 deteriorated secondary to sepsis and died at 14 days of age.

Conclusion

Discussion

Most case reports demonstrate improved fetal outcomes for twin 2 with an increase in gestational age after DID. However, there is an absence of agreement regarding the best management of these pregnancies. The majority describe antibiotics and regular monitoring for infection as the main lines of management.

However, a review of literature suggests that tocolysis, progesterone and cervical cerclage may play a role in prolonging the interval between delivery times of twins 1 and 2 in DCDA pregnancies. (3, 4)

There is thus a continuing debate on how best to manage patients with DID of the second twin, because of the increased risks of ascending infection and subsequent chorioamnionitis after delivery of the first twin. Therefore, the care must be individualised and obstetricians must be reminded that the success of DID of twin 2 cannot be predicted, nor easily achieved, as demonstrated by our two contrasting cases. (1)

Key words: DCDA, delayed interval delivery, twin two, augmentation, chorioamnionitis, sepsis.

Presenter name: H G Rather

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Placenta Accreta: A five-years experience

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Introduction

Placenta accreta occurs when part of the placenta or the entire placenta attaches abnormally to the myometrium. The incidence is 1/533 pregnancies but this number is rising due to the increase in cesarean rates.

Materials and Method

Retrospective analysis, including obstetrical and neonatal outcomes of the cases of placenta accreta in women surveilled at our Department between March 2009 and May 2014. The degree of placental invasion was suggested by ultrasound and MRI findings, and confirmed in the operating room according to clinical criteria.

Results

Eight cases of placenta accreta were included. All the women had a history of at least one cesarean section and in the current pregnancy had placenta previa. Seven of these were suspected by ultrasound (in the 2nd trimester of pregnancy) and by MRI (3rd trimester). These seven pregnant women were hospitalized in order to prepare for cesarean and eventual hysterectomy. One of these cases refers to a histerectomy at 22 weeks with the purpose of medical ending of pregnancy because of a serious fetal malformation. They were evaluated by a multidisciplinary team including obstetricians, gynecologists, urologists, anesthesiologists and neonatologists. The surgeries took place on the scheduled dates (between 35- 37 weeks). Total hysterectomy was performed in 6 patients and uterine conservation was possible in one case. The eighth case corresponded to a 28 weeks gestation, admitted to the emergency room who underwent an emergent cesarean section followed by hysterectomy, due to massive vaginal bleeding and hypovolemic shock. Although all women needed transfusional support they had uneventfull postpartum recoveries. Fetal outcomes were favorable in the all cases, except in the case of fetal malformation. The child who was born at 28 weeks was admitted in neonatal intensive care, with diagnosis of respiratory distress syndrome and hypoxic-ischemic encephalopathy; nevertheless she had a favorable recovery.

Conclusion

Prenatal suspicion of placenta accreta leads to the reduction of maternal morbidity and mortality. The monitoring and guidance should be provided in a tertiary hospital by a multidisciplinary team. The planning of delivery allows for timely intervention with decreased risk of maternal and neonatal serious complications.

Key words: placenta accreta; ultrasonography; cesarean section

Presenter name: Joana Sousa

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ACUPUNCTURE USE FOR PAIN RELIEF DURING LABOR

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Introduction

The birth of a child may be one of the most meaningful events of a woman's life and the pain of labour has been described as one of the most intense forms of pain.

During the last years an increasing amount of women are demanding alternative techniques to pharmacological treatments, in order to reduce or to cope with pain during labour.

Acupuncture is a Traditional Chinese Medical technique that has been used as an effective, not harmful alternative for dealing with labour pain. It is believed to stimulate the nervous system and produce the release of neurochemical messenger molecules. The stimulation of certain acupuncture points shows to affect areas in the brain which reduce sensitivity to pain and stress and help to relax.

Materials and Method

We have reviewed literature about acupuncture used during labour published on several Health Science Libraries and Platforms. The key-words used were "acupuncture therapy", "acupuncture analgesia" and "labour pain".

Results

Acupuncture increases women's satisfaction about their delivery, helps to cope with stress and pain in labour reducing thus the use of analgesic drugs and there are no negative side effects,

There is no agreement on the influence of acupuncture on the time of the delivery.

Conclusion

Although data is limited, acupuncture may provide analgesic benefit to women in labour and it could reduce the use of pharmacological treatment, besides, there are no side effects.

This technique can be used with other pharmacological and non-pharmacological methods as supplements to achieve a better childbirth experience.

Nevertheless there is a need to perform more studies including cost-benefit analysis, but health care professionals can provide informed choice to women who desire a non-pharmacological delivery.

It would be interesting to carry out suitable training for health care providers to increase knowledge and develop a respectful opinion on this matter.

Key words: "acupuncture therapy", "acupuncture analgesia" and "labour pain".

Presenter name: Cristina del Barrio

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CERVICAL LYMPHANGIOMA: A CASE REPORT

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Introduction

Lymphangiomas are rare developmental congenital anomalies of the lymphatic system; they consist in well-circumscribed benign masses of lymphatic vessels or channels that vary in size, usually greatly dilated and lined with normal endothelial cells. They may be classified into 3 groups: lymphangioma simplex, consisting of capillary-sized channels; cavernous lymphangiomas, consisting of dilated channels with a fibrous adventitial covering; and cystic lymphangiomas, or hygromas, composed of multiple cysts of varying sizes that are lined with endothelial cells.

The incidence of lymphangiomas is 1:6000 pregnancies and they are evident antenatally in about 50% of cases.

Although lymphangiomas can occur in any part of the body, 95% of them are found in the neck, head or axilla. When they are associated with hydrops, survival is unlikely.

Materials and Method

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Results

A 29-year-old primigravida was referred to our Hospital because of a multicystic cervical non vascularized mass suggestive of lymphangioma, with dimensions of 105 x 83 x 54 mm, detected at 34 weeks of gestation by ultrasonography. The prenatal MR, revealed no compression of the airway. No other abnormalities were detected. Due to the large size of the cyst as well as its location, the infant was delivered by elective cesarean section at 39 weeks. The newborn weighted 3315g and the Apgar Score was 9/10. No ventilatory support was needed. Surgery was performed on the on the 6th of life with complete excision of the mass. Pathology confirmed a cystic hygroma. The newborn was discharged 7 days after surgery. Fifteen months after surgery, the child is alive and without medical problems.

Conclusion

Fetal lymphangiomas are rare but can be are associated with high morbidity and mortality if airway compression occurs. Antenatal sonography is important to determine the extent of the mass, as well as the possible involvement around vital structures and for surgical and delivery planning.

Key words: lymphangioma; ultrassonography; delivery

Presenter name: Joana Sousa

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Intra-partum pyrexia: Infection or Epidural?

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Introduction

Background:
Pyrexia in labour is associated with both infectious and non-infectious causes including epidural analgesia, prostaglandin therapy, dysfunctional labour, overheating and dehydration. It is policy at our institution to commence all women with intra-partum pyrexia ≥38°C on intravenous antibiotics, irrespective of aetiology.
Objectives:
•To investigate the prevalence, risk factors and management of intra-partum pyrexia.
•To determine cases associated with infection.

Materials and Method

Method:
A retrospective analysis of hospital records and laboratory results of women in either spontaneous or induced labour, who presented with intra-partum pyrexia ≥38oC between January and August 2014. Standardised international definitions were used to determine the following infections: blood stream infection (BSI), chorioamnionitis and urinary tract infection (UTI).

Results

Results:
A total of 5918 women gave birth during the study period. 175/5918 (3%) presented with pyrexia. 2777/5918(46.9%) women had epidural analgesia, of whom 162(5.8%) presented with fever. Of the 3141/5918 women who were not administered epidural analgesia, only 13(0.4%) presented with pyrexia. The total number of nulliparous women was 2628/5918(44.4%), of whom 139(5.3%) presented with pyrexia. Of the 3290/5918(56%) multiparous women, only 36(1.1%) were febrile. Of the nulliparous women with epidural analgesia n=1709(65%), 139(7.3%) were febrile, while of those nulliparous women who did not receive epidural analgesia n=919(35%), only 10 (1.1%) presented with pyrexia. Of the 3290 multiparous women who did receive epidural analgesia (n=1068), 33(3.1%) had fever. While of the 3290 multiparous women who had no epidural analgesia, (n=2222), only 3(0.1%) had pyrexia.
170(97%) of the 175 febrile women were commenced on intravenous antibiotics. 13/175 women (7.4%) had a confirmed infection: 5 BSI, 4 non-bacteraemic UTI and 4 non-bacteraemic chorioamnionitis. 40/175 women (23%) had possible infection with a potential pathogen isolated from a vaginal or rectal swab only. 120/175 women (68.6%) had no microbiological evidence of infection and 2/175 women (1.1%) did not have a septic work-up. 27/175 women (15%) had documented fetal tachycardia in their records. 1/5 women (20%) with confirmed BSI had documented fetal tachycardia. 131/175(75%) met the criteria for Systemic Inflammatory Response Syndrome (SIRS). However SIRS criteria alone did not discriminate between women with confirmed infection, possible infection or no evidence of infection.

Conclusion

Conclusion:
Epidural analgesia and nulliparity are major risk factors for intra-partum pyrexia. The majority of women with intra-partum pyrexia do not have a documented infection. Improved diagnostic criteria are required to differentiate between infectious and non-infectious causes of pyrexia in labour in this era of widespread use of epidural analgesia.

Key words: Intra-partum pyrexia
Presenter name: Ogugua Iloabachie

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Is vaginal birth of dichorionic diamniotic (DCDA) twins still safe? A 10-year retrospective study in a Teaching Hospital in London

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Introduction

The objective of our study was to determine if vaginal birth of DCDA Twin pregnancy is still a safe option especially in the light of the fact that introduction of the European Working Time Directive (EWTD) in the United Kingdom may have had an adverse impact on the skills and experience with practical procedures such as internal podallic version (IPV), assisted vaginal breech deliveries, breech extraction and operative vaginal deliveries. In addition, even after a successful vaginal birth of the first twin, there is an increased risk of fetal distress, umbilical cord prolapse, placental abruption which may lead to an emergency caesarean section for the second twin.

Materials and Method

Data on twin pregnancies were obtained from our electronic Maternity Data System (Euroking) for a 10 year period (2000-2010). Retrospective review of individual Maternity Case Notes was carried out by investigators and data was entered into the Excel Spreadsheet. All patient identifiable data were excluded. A total of 892 maternities with Twin pregnancies were identified during the 10 year period. All monochorionic twins and triplets were excluded from the analysis as they underwent a planned, elective caesarean section as per our local protocol.

Results

Out of 892 maternities with Twin pregnancies between 2000-2010, out of 1778 babies, there were 1750 live births and 28 were stillbirths.

474 women (52%) attempted vaginal delivery and 48% were delivered by a planned, elective caesarean section due to maternal and/or fetal indication. These included malpresentation of the first twin, evidence of intra-uterine growth restriction (IUGR), major degree placenta praevia or a co-existing maternal condition such as pre-eclampsia that necessitated a planned, elective caesarean section.

Out of 474 women who attempted a vaginal birth, successful unassisted vaginal birth of both first and second twin was achieved in 220 women (46%). Operative vaginal birth (vacuum extraction or a forceps delivery) was performed in 89 women (19%) and 165 women (35%) had an emergency caesarean section. Out of 165 emergency CS which were performed for twins, 85 women were admitted in spontaneous onset of labour and 48 had induction of labour and 32 women had EmCS due to other reasons such as abnormal dopplers and maternal conditions such as worsening pre-eclampsia that necessitated urgent delivery. Majority of women who had an emergency caesarean section were primigravidae (62%) with the mean age of 31 years (range between 16 to 46 years). 68% of were performed at the gestation after 34 weeks, predominantly for failure to progress, abnormal CTG and maternal medical conditions. In contrast, common indications for emergency caesarean sections performed below 32 weeks were abnormal dopplers, IUGR and preterm labour with abnormal lie of the first twin.

Out of 35 emergency caesarean section which were performed for the second twin, 75% were performed for suspected fetal compromise (42%) and abnormal lie (32%) and only 2 babies had umbilical cord prolapse. In cases where the second twin had an emergency caesarean section, 78% of first twins were spontaneously delivered.

Conclusion

Our 10-year experience has shown that successful vaginal birth could be safely achieved in 82% of twins who attempt a vaginal delivery. Out of 454 women who attempted a vaginal birth, only 35 women (7%) had an emergency caesarean section after the delivery of the first twin. Abnormal lie, suspected fetal compromise and failed instrumental vaginal delivery were the commonest indications for the emergency caesarean section of the second twin after a successful vaginal delivery of the first twin.

Therefore, improvement of CTG Interpretation by continuous training of all staff in fetal monitoring and Hands-on Training on internal podalic Version (IPV) and operative vaginal deliveries may help in further reducing the emergency caesarean section rate for the second twin. Our maternity unit has a 'Hands-on' training on operative vaginal births and currently has the lowest reported failed instrumental delivery rate

in the UK. This may explain our lower failed instrumental vaginal birth rate for both first and second twins observed in our study.

Improvement of CTG interpretation to reduce operative delivery for suspected fetal compromise and to reduce false positive rate of CTG for intrapartum hypoxia may also help reduce intrapartum caesarean section rate. In our unit to improve CTG interpretation we were the first maternity unit in the UK to introduce a mandatory competency testing on CTG in 2010 and have seen a 50% reduction in our emergency caesarean section rate since 2011. Therefore, it is likely that improvement of CTG interpretation also would reduce unnecessary operative interventions of the second twin.

Key words: Twin delivery, mode of delivery of second twin, internal podalic version, CTG interpretation, training.

Presenter name: Ewelina Rzyska

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POSTPARTUM HEMORRAHAGE – UNEXPECTED UTERINE RUPTURE: A CASE REPORT

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Introduction

Postpartum hemorrhage (PPH) is an obstetrical emergency, clinically defined as an excessive bleeding that makes the patient symptomatic and/or result in signs of hypovolemia. It is a major cause of maternal morbidity and one of the three main causes of maternal mortality. PPH could be caused by defective myometrial contraction (atony), incomplete placental separation, trauma (lacerations, incisions or uterine rupture) and bleeding diatheses. PPH management varies depending on the cause but an early diagnosis and treatment are fundamentals to reduce morbidity and mortality.

Materials and Method

Case report.

Results

The authors present a case of a 40 years-old pregnant woman with three previous vaginal deliveries and two spontaneous abortions without curettage. She had a spontaneous labor at 38 weeks without oxytocin perfusion and an eutocic delivery occurred 5 hours after admission (newborn: male, 3290g, Apgar Score 4/5/9). Immediately after delivery she had a PPH and no vaginal/cervical lacerations, uterine atony, placental remnant or bleeding diatheses were identified. An emergent laparotomy was performed and a 3 cm transversal uterine rupture was identified at the level of left uterine artery entry. Prompt hemodynamic resuscitation and a subtotal hysterectomy were performed as last resort to control the uterine hemorrhage and stabilize the patient. During surgery the left ureter was injured and an intraoperative nephrostomy was performed. The woman had a good postoperative evolution and hospital discharge occurred at ninth postpartum day. Three months after surgery the lesion of the ureter was repaired and she was clinically well. Histological diagnosis: uterine rupture without other alterations.

Conclusion

PPH is an important cause of maternal morbidity and mortality. This case shows that the prompt diagnosis and interventions are important to improve the outcome. Risk factors for uterine rupture must be identified (grand multi-parity, scarred uterus, injudicious use of oxytocin, uterine tachysystole), but we cannot prevent its occurrence, like in this case of a grand multi-parity woman without uterine scar.

Key words: Postpartum hemorrhage, uterine rupture

Presenter name: Bruna Ambrósio

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Ten Group Classification (TGCS) -more than a caesarean section analysis tool

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Introduction

Audit of outcomes are fundamental to our understanding and delivery of intrapartum care. Much of this care is measured by women's satisfaction. Outcomes are measured and benchmarked against International standards. This information is published in an annual clinical report disseminated both locally and nationally. This review reports the outcomes for all single cephalic nulliparous women at gestation ≥ 37 weeks gestation attending our hospital in the years 2007 -2013.

Materials and Method

All women attending the National Maternity hospital have their labours and deliveries classified using the TGCS. Within this classification outcomes for all single cephalic nulliparous women in spontaneous labour were reviewed. Delivery events and outcome for all 16610 women who presented with a single fetus, cephalic presentation at gestation≥ 37 weeks in spontaneous labour were reviewed. Labour events and outcome, delivery method, blood loss and neonatal outcome are reported. Maternal satisfaction was evaluated by the provision of labour feedback forms to all women following delivery and personal follow up for those women expressing concerns or requesting furthur information following their labour. The form contains open-ended questions regarding their labour experiences and encourages women to suggest aspects of care that could be improved. Women can request further contact follow by ticking a box at the end of the form. All evaluations are returned daily to the labour ward and are read by all staff.

Results

There were 63421 women who delivered between 2007 and 2013 Of these 16610 were classified into Group 1, representing a contribution of 26.2% of the total population. The rate of spontaneous vaginal delivery was 11200/16610 (67.4%); vaginal operative delivery 4180/16610 (25.1%) and caesarean section rate n 1230 /16610 (7.4%). These rates have remained consistent over the 7 years. The use of oxytocin to accelerate labour 8493/16610 (51.1%) in this group also remains relatively unchanged. The epidural rate overall is 67.7%. This has seen an increase over the years from 64.7% in 2007 to 77.2% in 2013. The episiotomy rate for all vaginal deliveries was 49.7%reduced from 56.1% in 2010. Obstetric anal sphincter injury rate n 397 (2.7%) also remains consistent. An increase in maternal age was observed over the 7 years with 12.3% of the group aged ≥ 35yrs in 2007 compared with 18.3% in 2013. Body mass index ≥ 30 has risen from 6.3% to 7.2% over this period. The incidence of postpartum haemorrhage > 1000mls 1% and blood transfusion 1.6%) have been added since 2012. Neonatal outcomes measured by apgars < 7 at 5 mins 114/16610 (0.7%), cord pH < 7.0 (0.2%). The incidences of hypoxic ischemic encephalopathy 14/16610 (0.08%) reflect good outcomes in this group.

Evaluation forms were given to all women following delivery. The women completed these forms during their postnatal stay. The response rate ranged from 20-25% per annum. Over the seven years three strong themes have emerged regarding what women value in labour. The most common theme is the personal attention and support from the midwife with one to one care. The provision of information by all staff on their progress in labour was highly valued. Women also valued the short duration of labour. Epidural analgesia on maternal request also emerged as very important to them. The labour ward manager visited women who had questions and concerns following delivery on the postnatal ward where possible. Follow up by telephone or appointment was offered to all women who requested contact

Conclusion

The audit of outcomes in the context of the TGCS provides valuable information for midwives delivering care. Midwives in our organization place particular emphasis on the outcomes in Group 1 as an indicator of the quality of clinical care provided. Successful outcomes in a first labour influence the subsequent labours and outcomes in terms of maternal anxiety and expectation. Use of TGCS provides context to the care provided both in terms of maternal and fetal risk factors.

The use of an evaluation form and debriefing service enables us to be responsive to what our women need in labour. It also provides support and encouragement to staff from the many positive comments received. Use of TGCS provides context to the care provided both in terms of maternal and fetal risk factors, evaluation forms provide us with insight into maternal experience and expectation.

We are responsible for practicing evidence-based midwifery but we also need to collect and understand the outcomes that our care provides.

Key words: Audit outcome satisfaction

Presenter name: Martina Murphy

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Indication for Caesarean Section in Spontaneously labouring single cephalic Nuliparous (SCNT) Pregnancies at term (Group 1) Ten Groups Classification of Caesarean section (TGCS).

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Introduction

Caesarean section (C/S) is now the most commonly performed surgical procedure in developed countries. The value of using an internationally accepted classification system of births allows for the comparison of specific groups with the same characteristics. This retrospective cohort study examines the indication for delivery by caesarean section in SCNT Group 1 labours over nine years 2005 -2013 at the National Maternity Hospital (NMH).

Materials and Method

Clinical outcomes for all group 1 C/S deliveries at the NMH were classified in accordance with the (NMH) classification of indication for C/S. This classification provides a summary diagnosis of treatment provided and indication for delivery by caesarean section in labouring women in Group 1:

1. Fetal reason no oxytocin given: Fetal compromise

Dystocia is divided into inefficient uterine action (IUA) with progress at less than 1cm/hour and efficient uterine action (EUA) where progress was initially more than 1cm/hour.

2. Dystocia, IUA, inability to treat due to fetal intolerance: diagnosis of dystocia is made, treatment with oxytocin commenced, but maximum dose not reached because of fetal intolerance
3. Dystocia, IUA, inability to treat, due to over contracting: diagnosis of dystocia is made, treatment with oxytocin commenced, but maximum dose not reached because of uterus over contracting.
4. Dystocia, IUA, poor response: diagnosis of dystocia is made, treatment with oxytocin commenced, maximum dose achieved and failure of cervix to dilatate
5. Dystocia no oxytocin given: diagnosis of dystocia is made, treatment with oxytocin is not given for different clinical reasons
6. Dystocia EUA, cephalopelvic disproportion/malposition: diagnosis of dystocia is made after initial efficient uterine action and in most cases in Group 1 treatment with oxytocin

Outcomes of all group 1 deliveries are reported on in accordance with the application of this classification. The advantage of this classification is that it can be used irrespective of the key variables between units in the management of labour namely, the diagnosis of labour, artificial rupture of the membranes, criteria for diagnosis of dystocia, timing and dose of oxytocin used and epidural rate. The distribution of the results will describe the management philosophy of the unit.

Results

There were 78899 women delivered at the NMH over the nine years studied. The overall C/S rate was 20.4%. The SCNT in spontaneous labour contributed 20569/78899 (26%) to the total hospital population and 1519/78899 (1.9%) to the overall c/s rate. The group one C/S rate was 1519/20569 (7.4%) over the study period. within this group the delivery indication for each group one caesarean section was classified in accordance with the methodology described

Fetal reason no oxytocin was recorded as the delivery indication in 260/20569 (1.3%)of cases. Dystocia inefficient uterine action with inability to treat due to fetal intolerance contributed 639/20569 (3.1%). Dystocia inefficient uterine action with inability to treat due to over contracting of the uterus 257/20569 (1.2%) and dystocia inefficient uterine action with poor response to treatment accounting for 180/20569 (0.9%) of deliveries by C/S. Dystocia with no oxytocin given contributed 31/20569 (0.1%) to the c/s rate. Persistent occipito posterior position and cephalopelvic disproportion when treatment for dystocia was given and efficient

uterine action achieved contributed 152/20569 (0.7%) to the group 1 C/S rate.

Conclusion

The use of a tool to classify indication for C/S provides clarity and understanding to midwives and obstetricians providing care to women in labour. The classification of C/S indication has been applied and reported annually over the last nine years and remains consistent across all indications in Group 1. Other units especially those with a higher CS rate in Group 1 may benefit from classifying their caesarean sections in a similar manner possibly leading to changes in the way they manage labour.

Key words: Classification Caesarean section Nulliparous spontaneous labour
Presenter name: Martina Murphy

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Management of Small for Gestational Age Fetuses at a Large UK Tertiary Referral Hospital

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Introduction

The UK Royal College of Obstetricians and Gynaecologists (RCOG) defines a fetus as Small-for-Gestational-Age (SGA) if the estimated fetal weight on ultrasound (US) is <10th centile on a customised GROW chart. SGA fetuses are at greater risk of perinatal mortality and morbidity; monitoring can reduce associated risk . The key surveillance tests are US for growth, and umbilical artery (UA) and middle cerebral artery (MCA) Dopplers. In 2013 the RCOG published Green-top Guideline 31, second edition, which provides evidence-based recommendations for the antenatal management of SGA fetuses. The Royal Victoria Infirmary in Newcastle Upon Tyne, UK has 7800 annual deliveries and provides tertiary referral maternity care. In May 2014 they implemented guidelines, including a management algorithm, which mirrored the RCOG advice. It was also decided that, locally, severely SGA fetuses would be defined as <5th centile (RCOG uses <3rd centile) and additional monitoring for these fetuses was included.

Materials and Method

Aim: To assess whether management of known SGA fetuses at the RVI adheres to RCOG and Trust Guidelines.

- Retrospective study of the 66 patients attending the Maternity Assessment Unit scan list (01/09/14-30/11/14) with an SGA fetus diagnosed. Patients were excluded if they had not delivered by the end of the audit .
- Data on US surveillance from diagnosis was collected from patient's notes, using a pro-forma based on the Trust's SGA Management Algorithm.
- Information regarding gestation and mode of delivery was recorded to analyse adherence to RCOG guidelines.

Results

66/76 notes were available, of which 29 were diagnosed with an SGA fetus, and 37 with a severely SGA fetus (<5th centile).

- 28 patients (42%) received US management that entirely followed Trust Guidelines.
- 16 patients (24%) followed the US pathway but received extra, unnecessary measurements
- 22 patients (33%) breached guidelines for US surveillance; 27% from guideline misinterpretation, 5% had referrals missed, and 68% received fewer scans than indicated.
- Regarding delivery, 47 patients (71%) followed RCOG guidelines, 5 patients (8%) did not follow due to patient choice, 5 patients (8%) were incorrectly managed, and 7 patients (11%) had maternal complications that meant their delivery was managed outside of routine guidance.

Conclusion

Introducing the SGA guidelines at the RVI has enabled the management of most patients to be in-line with the updated RCOG guidance. This suggests that the guidelines set out by the RCOG are achievable and realistic, validating their implementation in more hospitals. Most breaches arose from missed MCA Doppler readings or misinterpretation of the growth centiles, which highlights the need for further review. Additionally, addressing the causes behind unnecessary scans would not only reduce the US workload at the RVI, but also increase the sustainability of the RCOG guidance in other hospitals.

Key words: Small-for-Gestational-Age, Ultrasound, Management

Presenter name: L. Wallace/ SNE. Webster

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COMPARISON OF THE REPRODUCIBILITY AND ACCURACY OF FIGO, ACOG and NICE FETAL MONITORING GUIDELINES

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Introduction

Cardiotocography (CTG) is subject to wide interobserver disagreement and this can have a negative impact on the method's accuracy and efficacy. The main aim of this study was to compare interobserver agreement and accuracy of CTG analysis, when performed according to the three major interpretation guidelines (FIGO, ACOG and NICE).

Materials and Method

A total of 151 CTG tracings were evaluated by 27 clinicians from three different centers where FIGO, ACOG and NICE guidelines are routinely used. The last 60 minutes before delivery were evaluated, and the clinicians were asked to assess basic CTG features and to provide and overall tracing classification. Interobserver agreement was assessed using the proportions of agreement (PA) with 95% confidence intervals (95% CI). The accuracy of tracings classified as "category III" or "pathological" was evaluated for predicting severe newborn acidemia (umbilical artery pH < 7.05), calculating sensitivity and specificity with 95% CI.

Results

The ACOG group had the highest agreement in overall CTG classification (PA=0.73 95%CI 0.70-76), but this was mainly due to agreement on category II, where 81% of tracings were included. Categories I and III had a low agreement (PA=0.26, 95% CI 0.18-33 and PA=0.26, 95% CI 0.18-34, respectively). In the NICE group, tracings were evenly distributed between the classes (30%, 33%, 37%) and there was higher agreement for classification of CTGs as normal or pathological (PA=0.55, 95% CI 0.48-0.62 and PA=0.66, 95% CI 0.59-0.71) than as suspicious (PA=0.42, 95% CI 0.38-0.47). In the FIGO group, there were fewer classifications in the normal class (9%, 52%, 39%) and interobserver agreement was similar for all categories (PA=0.54-0.63). The FIGO and NICE groups showed a trend towards higher sensitivities in prediction of newborn acidemia (NICE=97%, 95% CI 61-100; FIGO=89%, 95% CI 52-98) than the ACOG group (32%, 95% CI 10-67), but the latter had a higher specificity (ACOG=95%, 95% CI 90-98, FIGO=63%, 95% CI 55-71), NICE=66%, 95% CI 58-73).

Conclusion

There are important differences in the way clinicians interpret CTG tracings, depending on the classification system that they use. With the ACOG guidelines, attribution of category II is very frequent, leading to a high overall interobserver agreement, a low sensitivity and a high specificity of category III. With the FIGO and NICE guidelines, a greater distribution of classifications is seen, and there is a high sensitivity but a limited specificity of pathological tracings in prediction of newborn acidemia.

Key words: cardiotocography, intrapartum fetal monitoring, guidelines

Presenter name: Susana Santo

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OVERNIGHT OUTCOMES IN A TERTIARY CENTER LABOUR WARD

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Introduction

Adverse outcomes, both neonatal and maternal, have been described as more frequent during night-time shifts. These findings have been justified by both differences in staff number, and experience, and exhaustion after several hours of workload.

The aim of this study is to understand at which extent these night-day differences are still a reality in an emergency room in which the health care team does not change overnight.

Materials and Method

A retrospective study was conducted regarding the period between 2008 and 2012 in a tertiary hospital in which the medical team is composed by 4 elements (2 specialists and 2 residents) both during night and day.

Data was collected using patient electronic databases: ObsCare® and SAM®. ICD-9 code system was used. During the 5 years period, a total of 14462 births occurred. For the purpose of this study those with gestational age under 35 weeks (n=587), induced labours (n=2779), elective C-section (n=961), multiple pregnancies (n=444) and those in which a major malformation was diagnosed (n=548)were excluded. Time of day was divided in three different periods of eight hours: day-time (8am – 4pm), evening (4pm – 12pm) and night-time (12pm – 8 am).

Regarding neonatal outcomes Apgar score, birth asphyxia and encephalopathy, admission to a neonatal intensive care unit (NICU), neonatal and perinatal death, need of endotracheal entubation, trauma and meconium aspiration syndrome were the analysed parameters. We also created a neonatal score combining most of these parameters.

Maternal outcomes analysed included rates of 3rd and 4th degree tears, admission to an intensive or intermediate care unit, rates of readmission in the 30 days following the birth and maternal death.

Results

A total of 9143 deliveries were analysed, of those 56.7% (n=5182) vaginal deliveries, 24.6% (n=2248) instrumented vaginal deliveries, 15,7% (n=1439) urgent C-sections and 3% (n=274) emergent C-sections. None of the neonatal outcomes had a significant difference between the 3 shifts.

Newborns were admitted to a NICU in 3.6% (n=325) of the cases. The higher rate of NICU admissions occurred during the evening shift corresponding to 3,8%.

An Apgar score lower than 7 at the 5th minute was found in 0.7% of the deliveries in a total of 66 newborns. During the day shift a total of 16 cases were reported (0.5%) and during the evening shift 22 (0.7%).

Birth asphyxia and birth encephalopathy were rare events with a total of 17 and 2, respectively.

Birth trauma occurred in 1.5% of all births and no difference was found overnight.

Of the maternal outcomes only 3rd and 4th degree tears had a significant different rate between the 3 time periods with the lowest rate 0,7% (n=20) occurring in the night-time period.

Conclusion

A consistent health care team in a labour ward seems to be crucial in order to maintain the same level of care quality overnight. It is possible that differences previously described might be avoided if the staff number was not reduced during the night.

Key words: maternal, neonatal, outcomes, night-time shift

Presenter name: S. Tavares

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OBSTETRIC OUTCOMES – ADOLESCENCE VERSUS ADULTHOOD: 17 YEARS OF EXPERIENCE

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Introduction

Adolescence is a period of multiple biological, physiological, psychological, intellectual and social changes. Teenage pregnancy is usually unplanned and considered high-risk, posing medical and social problems. Teenage pregnancy is also associated with an increased risk of anemia, preeclampsia, fetal growth restriction, preterm delivery, operative delivery and post-partum depression, which can be attributed to biological immaturity. At Hospital Prof. Dr. Fernando da Fonseca's (HFF) obstetrics department there is a teenage pregnancy consultation in which physicians, nurses, social workers, psychologists and nutritionists colaborate. The goal of the authors was to compare teenage pregnancy with adulthood pregnancy data, taking in account: the number and route of delivery, gestational age at birth and weight of newborns.

Materials and Method

Retrospective study of the deliveries occured between Januray 1997 and December 2013 at HFF's obstetrics department. The analysis were conducted through Excel 2010®.

Results

During the period under review there were 75020 deliveries registered at HFF, from which 1700 among adolescents (2,3%). Within the teenage deliveries, 16% of these were before 37 weeks of gestation, comparing with 10% in adult women. The cesarean section rate was 21% among adolescentes and 33% in adult women. 10% of adolescents had an operative vaginal delivery, comparing with 8% of women in adulthood. There were 3,6% of newborns from adolescent mothers weighting less than 1500g at birth, more than the triple amount of newborns from adult mothers (1,1%).

Conclusion

The present study allows us to conclude that the cesarean section rate in adolescent women was lower comparing with adult women, while the rate of operative vaginal deliveries was slightly higher. The number of preterm births was higher in the group of teenage mothers, as well as the number of infants with less than 1500g. These findings are consistent with literature.

Key words: Pregnancy outcomes; Adolescence; Adulthood.
Presenter name: Bruna Ambrósio

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Risk factors for labor dystocia in primiparous women

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Introduction

Important way to prevent cesarean sections (CS) is to prevent the first CS. While dystocia is one of the most common causes leading to acute CS, we retrospectively observed, which are the differences between primiparous labors, one leading to normal birth and other to acute CS.

Materials and Method

This was a retrospective case-control study in Tampere University Hospital between February 2009 and December 2012. The study group consisted of 298 primiparous women, whose intended vaginal labor ended up to acute cesarean section (CS) for dystocia identified with following International Classification of Diseases (ICD-10) -diagnoses: O62 Abnormalities of forces of labor, O63 Long birth and O64 Obstructed labor due to malposition and malpresentation of fetus. Next primiparous women attending to delivery unit with intended and successful vaginal delivery were picked up as controls (N=302). Both cases and controls were primiparous women with singleton pregnancy, cephalic presentation and ≥37 weeks gestation. Deliveries were spontaneous or augmented. Rule-out criterias were: breech presentation, <37 weeks gestation, acute cesarean section based on fetal cardiotocography or if elective CS was planned, but delivery activated spontaneously. Variables that were recorded included maternal characteristics (i.a. age, height, weight), factors during labour (i.a.analgesia, oxytocin use) and newborn characteristics (i.a. birth weight, Apgar scores). To evaluate differences between groups chi square or Student´s t-test were used, when appropriate.

Results

Among the cases ending to acute CS, the labor was less often spontaneously going on in the active phase when attending to delivery unit (CS 35.6% vs VD 65.2%; OR 3,40 (2,44-4,76) p<0,001). Induction of labor with prostaglandins or balloon was more common in CS group (VD 42 (13,9 %) vs CS 90 (30,2 %);OR 2,68 (1,78-4,03);p< 0,001), as well as use of epidural analgesia (VD 214 (70,9 %) vs CS 282 (94,6 %);OR 7,25 (4,13-12,71); p<0,001) and oxytocin augmentation (VD 220 (72,8 %) vs CS 283 (95,0 %);OR 7,03(3,95-12,53);p<0,001). In the cases ending to acute CS, the mothers were slightly older (VD 27,3 y vs CS 28,8 y; OR 1,06 (95 % CI 1,03-1,10); p<0,001), shorter (VD 165,7 cm vs CS 163,3 cm; OR 0,93 (0,899 -0,954); p<0,001), heavier (BMI before pregnancy VD 22,6 vs CS 24,1; OR 1,10 (1,06-1,14); p<0,001) and had more often a chronic disease (VD 73 (24,2 %) vs CS 102 (34,2 %);OR 1,63 (1,14-2,33): p=0,007). The newborns were heavier in the CS group compared to VD (VD 3469 g vs CS 3666 g; OR 1.07(1.02-1.12); p<0,001). Fear of childbirth did not increase risk of CS.

Conclusion

Induction of labour, and being not in active phase of spontaneous labor when attending to delivery unit were assosiated with dystocia and acute CS. Advanced maternal age, lower height, higher weight and chronic illnesses as well as higher fetal weight associate to dystocia. More common epidural analgesia and oxytocin use propably reflect the treatment needed in the cases of prolonged course labor.

Key words: dystocia, primipara, cesarean section, BMI

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Delivery Management of Small for Gestational Age Fetuses at a Large UK Tertiary Referral Hospital

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Introduction

The UK Royal College of Obstetricians and Gynaecologists (RCOG) defines a fetus as Small-for-Gestational-Age (SGA) if the estimated fetal weight (EFW) on ultrasound (US) is <10th centile on a customised GROW chart. SGA fetuses are at greater risk of perinatal mortality and morbidity, and the development of intrapartum fetal distress. The RCOG recommends delivery of SGA fetuses by 32 weeks if umbilical artery (UA) end diastolic flow is absent/reversed (AREDV), by 37 weeks if UA Doppler is abnormal, and at 37 weeks if normal.

The Royal Victoria Infirmary (RVI) in Newcastle Upon Tyne, UK has 7800 annual deliveries and provides tertiary referral maternity care. They have implemented guidelines that mirror RCOG recommendations

Materials and Method

Aims

- To audit the delivery management of SGA fetuses, with regards to gestation
- To examine delivery mode post IOL
- To compare the expected and actual birth weight of SGA fetuses

• Retrospective study of the 64 patients attending the RVI's Maternity Assessment Unit scan list (01/09/14-30/11/14) with an SGA fetus diagnosed

• Patients were excluded if they did not deliver by the end of the audit

• Patient demographics, mode of delivery, gestation at delivery, and patient decisions were collected from patient notes

• Birth weight and last EFW were recorded for each fetus. A predicted birth weight was extrapolated from the last EFW centile and compared to the actual birth weight

Results

64/74 notes were available - mean maternal age 27.5 (19-44), parity range 0-6 (23 primips and 41 multips), 29 had a SGA fetus (5th-10th centile), 37 had a severely SGA fetus (<5th centile).

• 8/64 (13%) had maternal complications requiring their delivery to be managed outside of routine guidance

• 3/64 (5%) had AREDV; all were delivered by 32 weeks or as soon as possible

• 6/64 (9%) had an abnormal UA Doppler; all were delivered by 37 weeks or as soon as possible

• 47/64 (73%) had normal UA Doppler readings; 96% were offered delivery as close to 37 weeks as possible, 80% of which accepted the delivery plan

• In the normal UA Doppler group, 8.5% had a spontaneous delivery, 10.6% had an elective CS, and 80.9% were induced. 87% of inductions had vaginal births and 13% had an emergency CS

• 55% of babies were larger than estimated and 45% were smaller. Babies' actual birth weight ranged from 534g heavier to 870g lighter than estimated (mean +/-179g grams).

Conclusion

Most patients at the RVI are delivered at a gestation that adheres to RCOG guidance. Reassuringly, fetuses at most risk (those with an abnormal or AREDV UA Doppler) were managed particularly accurately. The low rate of emergency CS in induced patients with an SGA fetus and normal UA Doppler is reassuring and supports the practice of offering IOL.

The inaccuracy of US EFW's is apparent and the large number of fetuses whose weight is over-estimated implies a potential for under-diagnosis of SGA.

We have shown that the RCOG guidance is both achievable and appropriate, and supports their continued implementation.

Key words: Small-for-Gestational-Age, Management, RCOG, Delivery

Presenter name: L. Wallace / SNE. Webster

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Case Report - Successful Pregnancy after B-Lynch Compression Suture

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Introduction

The B-Lynch suture has been increasingly used in the management of postpartum hemorrhage (PPH). However, its implications for fertility remain uncertain as there are few cases of successful pregnancy after this procedure reported in literature.

Materials and Method

We report a case of a 31 years old woman, with type 1 diabetes, poorly controlled even with insuline pump, who experienced a stillbirth at 37weeks gestation. The delivery was complicated by severe postpartum hemorrhage due to uterine atony, successfully treated with B-Lynch suture, after failed conservative pharmacological management.

Results

The subsequent pregnancy, one year later, occurred before recommended (HbA1c 9,8%). The optimization of glucose control was extremely difficult, with excessive hyperglycemia as well as frequent episodes of hypoglycemia. A multidisciplinary effort was made and she started to use a pump that automatically halts insulin delivery when glucose levels are too low in order to prevent an adverse outcome. However, at 34 weeks, on account of fetal distress identified in cardiotocography and ultrasound (biophysical profile 6/10), a cesarean section was performed. She gave birth to a live child of 3320g, Apgar score 7/9/9, with a regular neonatal course. During the cesarean section, thin laces of connective tissue were found along the sutures placed on the uterus during the previous B-Lynch operation, no other anomalies were found.

Conclusion

The B-Lynch suture could be an alternative surgical procedure to control PPH from uterine atony, apparently without impact on fertility.

Key words: B-Lynch suture; postpartum hemorrhage; fertility

Presenter name: Inês Ramalho

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Does a portable image intensifier in the obstetric theatre improve outcomes in prophylactic pelvic arterial balloon catheter occlusion as a part of the Triple P Procedure in the management of morbidly adherent placenta?

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Introduction

Placental Adhesive Disorders are associated with serious maternal morbidity and mortality. Triple P Procedure for morbidly adherent placenta is a three step conservative surgical alternative to peripartum hysterectomy. It involves preoperative placental localization, pelvic devascularization and placental non separation with myometrial excision and reconstruction of the uterine wall. After delivery of the fetus uterine blood flow is reduced by inflation of occlusion balloons in the anterior division of internal iliac vessel. There is a theoretical concern of fetal compromise secondary to vasospasm after insertion of prophylactic balloon catheters and migration of balloon catheters, which may result in maternal ischaemic complications.Our objective was to evaluate maternal and fetal outcomes with prophylactic balloon placement as a part when a portable image intensifier was used in the obstetric theatre to exclude balloon migration prior to commencing the Procedure

Materials and Method

Retrospective study of 29 cases of morbidly adherent placenta managed using Triple P Procedure between 2010-2014 at St George's Hospital London. All patients had occlusion catheters placed with their tips in anterior division of internal iliac artery, using a pulsed low dose fluoroscopic guidance. These balloons were occluded as a test check in the radiology suite and then deflated before transferring to the obstetric theatre. Once in the obstetric theatre, position of the catheter was rechecked using image intensifier in all cases.
After delivery of the fetus the balloons were inflated to reduce uterine blood flow and hence, to decrease amount of blood loss from myometrial edges during myometrial excision.
Maternal morbidity (intraoperative blood loss, Peripartum hysterectomy, organ damage, amount of blood transfusion , post partum hemorrhage, need for uterine artery embolization, hospital stay and operative time) and fetal outcomes (Apgar score, need for NNU admission and perinatal mortality) were analyzed .
Adverse effects with regard to vascular complications and thrombus formation were also analyzed

Results

Average intra-operative blood loss was 2.16 L (S.D ±1.29 L).Three patients developed PPH after delivery (10.3%) .Mean total blood loss (intraoperative and post section) was 2.2 L (S.D ±1.34L) . Two women who had PPH post caesarean section required postoperative pelvic arterial embolization (6.9 %) and one was managed medically. None of the patients had peripartum hysterectomy or injury to bladder or bowel. Seventeen Women (58 %) needed blood transfusion. An Average 2.48 units of blood was transfused ,while average 2.77 L crystalloids was given intraoperatively.Mean operating time was 76 minutes and the average HDU stay was 1.03 days days. Only three patients (10.3%) had iliac arterial thrombosis which was managed effectively without any long term ischemic complications and none of the patients had complications due to balloon migrations. No cases of fetal hypoxia or neonatal depression was noted .Six babies were admitted to Neonatal Intensive Care (20%) .

Conclusion

Bilateral pre-operative prophylactic balloon catheter placement and their subsequent occlusion of after delivery of the fetus during the Triple P Procedure appears to be safe with no adverse maternal or neonatal outcomes, when a portable intensifier was used to double check the position of the balloon catheters prior to commencing the procedure. In cases of massive PPH, UAE can be performed swiftly avoiding the need of a peripartum hysterectomy.
Therefore, use of the portable image intensifier immediately prior to commencing surgery appears to have reduced the complications secondary to balloon migration. In our series, no evidence of vasospasm leading to fetal hypoxia was noted.

Key words: Prophylactic Balloon occlusion, Portable image intensifier, Morbidly adherent placenta, Peripartum hysterectomy

Presenter name: Dr S Muhammad

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LOW-RISK PREGNANCY MEANS A LOW-RISK DELIVERY?

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Introduction

There is a growing interest in giving birth outside an obstetric unit, precluding that a low-risk pregnancy is associated with a normal vaginal delivery with negligible risk for pregnant and fetus. The aim of this study was to determine the incidence and risk factors for high-risk delivery (HRD) in a Portuguese cohort with low-risk pregnancy.

Materials and Method

This was a retrospective study between January and November of 2014 in tertiary care hospital. We included all term (> 37 weeks gestation) singleton pregnancies, with antenatal care (> 6 appointments), without fetal or maternal disease, and that got into spontaneous labor. Electronic fetal monitoring was performed throughout all labour, and whenever asked regional analgesia. Maternal characteristics (age, BMI, parity), type of delivery and its indication, fetal weight and Apgar score at 1st minute, maternal and neonatal morbidity were collected. A HRD was defined whenever occurred at least one of the following events: intrapartum fever, abnormal CTG, need for instrumental delivery or caesarean section, shoulder dystocia, Apgar score at 1st minute ≤7, 4th degree laceration, cervical tear, postpartum haemorrhage, retained placenta and postpartum hemoglobin <8 g /dL. The data were compared using Chi-square test, Student t test and multiple regression, as appropriate. A p-value of <0.05 was considered significant.

Results

Of 730 cases with a low obstetric risk pregnancy 40% had a HDR. Obstructed labour/failure to progress in second stage and fetal distress, with the need for instrumental delivery or caesarean section, were the most common reasons for a change of risk during delivery. Nulliparity was the only variable associated to an increase risk for a HRD (OR 5.428, CI 95%).

Conclusion

This study emphasizes the importance of giving birth in an obstetric unit, regardless of the risk associated to pregnancy.

Key words: birthplace, low risk pregnancy, high risk delivery

Presenter name: Maria Carvalho Afonso

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ADNEXAL MASS IN PREGNANCY: A CASE REPORT

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Introduction

Routine ultrasound for antenatal evaluation at 11 to 13 weeks and 6 days results in increased detection of asymptomatic adnexal masses during pregnancy. Although most of them are benign and usually disappear by the second trimester, their persistence represents a major concern related to the obstetrical management and the possibility of malignancy.

Materials and Method

A case is reported.

Results

The authors reported a case of a 30 years-old primigravida, presenting with a right adnexal mass at the time of the first trimester scan.

It was a thin-walled anechoic unilocular cyst with 99x63mm with normal doppler flow evaluation.

The pregnancy was managed with periodic ultrasound imaging. She was asymptomatic and tumor markers (CA125, CEA) were normal.

Besides persisting, the adnexal mass increased in volume, reaching 112x62x114 mm.

At 17 weeks, she underwent an exploratory laparoscopy, converted in laparotomy for technical difficulty, with cystectomy.

A serous cystadenoma was diagnosed. Contralateral adnexa was normal.

The pregnancy course after surgery was normal, and she underwent to spontaneous labor at 39 weeks.

Conclusion

Although the majority of adnexal masses in pregnant women are benign, management is not consensual and can be very challenging.

In this case, the resection made possible to exclude malignancy in an early stage and, in another way, allowed the reduction of potential complications, such adnexal torsion, rupture or obstruction of labor.

Ultrasound assessment and serum markers are important tools in the management, and surgery at early second trimester is a safe option for voluminous adnexal masses or when malignancy cannot be excluded.

Key words: Adnexal masses, Pregnancy, Ultrasonografy, Ovarian cyst

Presenter name: Soraia Cunha

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FETAL HEART RATE ANALYSIS IN PRETERM BIRTH

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Introduction

The fetal heart rate (FHR) and its variability (FHRV) in preterm fetuses are determined by several factors, e.g. an immaturity of autonomous nerve system (predominance of sympathetic nerve system), compensatory and adaptive mechanisms, and an immaturity of preterm myocardium. They limit a standard classification of cardiotocographic (CTG) patterns, and determine fetal and neonatal outcome. The aim of our study was to evaluate differences in the FHRV in preterm birth comparing with healthy term fetuses.

Materials and Method

A total cohort of 116 fetuses was divided into the control group of healthy term fetuses (37+0 – 41+6 g.w., n=96), and the study group of preterm fetuses (25+2 – 36+6 g.w., n=20). The study group was created by three sub-groups according to the gestational week (g.w.): A: 25+2 – 31+6 g.w. (n=4), B: 32+0 – 34+6 g.w. (n=8), C: 35+0 – 36+6 g.w. (n=8). We performed the external CTG (Philips Avalon FM20, Philips Medical Systems, Netherlands) in every fetus in labor with the minimum duration of 30 minutes, which was discontinued not more than 20 minutes before the end of delivery. An automatized analysis of FHR parameters (basal fetal heart rate (BFHR), long-term variability (LTV), short-term variability (STV), and SR) was done ex-post. Statistics: Kolmogorov-Smirnov test, Mann-Whitney test, level of significance: $p<0.05$.

Results

We found 2 fetuses with intrauterine growth restriction (IUGR), 2 pregnancies with preeclampsia (PEE), and 9 pregnancies with preterm premature rupture of membranes in the study group. A normoxic status (pH≥7.15, BE<-12.0 mmol/L in umbilical arterial blood) was found in every fetus in both groups. The significant difference was found in SR ($p=0.032$), in the decrease of STV ($p=0.041$), in BFHR ($p=0.028$) comparing control and study group, and in BFHR between sub-group A and controls ($p=0.022$), respectively. We saw no differences in LTV in followed groups.

Conclusion

The fetal prematurity is associated with the significant changes in SR, STV, and BFHR comparing with healthy term fetuses. The potential bias of our results is in limited number of followed fetuses, associated diseases (e.g. IUGR, PEE), and pharmacological treatment. Our findings show, that the standard CTG parameters (e.g. BFHR, decelerations) are insufficient to determine wellbeing in preterm fetus. Obstetricians should have more additional information (e.g. STV, SR) in the assessment of intrauterine fetal status.

Key words: fetus, heart rate, preterm birth
Presenter name: Kamil Biringer

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ASSYMETRY OF EXTERNAL ANAL SPHINCTER INNERVATION DETECTED BY SURFACE ELECTROMYOGRAPHY

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Introduction

Several studies have suggested that functional asymmetry of pelvic floor innervation exists in healthy subjects. The asymmetry of sphincter innervation is strongly associated with postpartum incontinence in those cases in which the trauma occurs on the dominant side of innervation. Episiotomy is the most common cause of perineal trauma during delivery; right side mediolateral episiotomy is usually recommended.

Superficial electromyography (sEMG) is recently introduced non-invasive method for detecting the innervation zones of external anal sphincter (EAS).

The aim of the study is to locate the IZs of anal sphincter by the means of sEMG, in order to evaluate the effect of episiotomy related trauma on the external anal sphincter muscle.

Materials and Method

In this prospective cohort study, 60 pregnant primiparous women (age 27±4yrs) were involved and EMG was performed to detect the distribution of IZs of EAS. Longo score assessment for detecting obstructive defecation syndrome and faecal incontinence score (FISI) were performed during all visits. The information about the labour process was collected from the medical records. Endoanal ultrasound was performed to exclude possible sphincter damages during pregnancy and 8 weeks after delivery. The EMG measurements were performed two times: during the 2nd trimester of pregnancy and 8 weeks after delivery, in order to recognize any changes in the innervation after delivery. EMG signals were detected by a cylindrical probe with 16 equally spaced silver electrodes and acquired with the Trentadue amplifier (OT Bioelettronica, Turin, Italy). Innervation zone distribution was detected before and after delivery with a recently developed technique.

Results

36 women delivered up to date: 29% of them had episiotomy on the right side, 42% had spontaneous lacerations, 16% had no damage, and 13% had Caesarean section. Descriptive statistics on the subject sample showed a pregnancy duration of 39.6 ±1.9 weeks, infant weight was 3.58 ±0.56kg, duration of the 1st stage of labour was 7 ±3.5 hours, the 2nd stage 0.9± 0.5 hours. In addition, 17% of the subjects had epidural anaesthesia and 54% had oxytocin during delivery. Longo score before and after labour was 0.94 ± 1.3 and 0.45 ± 1.1 respectively. None of the women had any sphincter damage before pregnancy or wound complications after delivery.

The distribution of IZ identified before delivery was heterogeneous: 7% of women were innervated dominantly on the left side, 63% - on the right, and 30% had the IZ distributed symmetrically. The distribution of IZ after delivery was also analysed but the small sample of subject did not jet allow drawing statistically significant conclusions on the effect of episiotomy on the IZ distribution.

Conclusion

A novel approach for identification of innervation patterns was applied to a group of women. The innervation was observed to be heterogeneous with a tendency of asymmetry predominant on the right side. The preliminary data of IZ change after delivery were promising because pre-emptive location of innervation zones (IZ) could allow choosing the least invasive side for episiotomy.

Key words: Superficial electromyography, external anal sphincter, episiotomy

Presenter name: Vita Zacesta

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Induction of labour in women with previous caesarean sections: predictors of success in a tertiary referral centre over a 10 year period

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Introduction

Rate of attempted vaginal birth after caesarean section (VBAC) has declined from 28% in 1996 to 8 % in 2006 in the USA. Induction of labor in women with previous caesarean section is controversial due to potential risk of increased scar rupture, which is a potentially life threatening complication for both mother and the fetus.

Currently there are no randomised trials comparing induction and augmentation of labor in planned vaginal both after caesarean section (VBAC). Excellence (NICE) does not discourage the use of prostaglandins, there are no explicit guidelines.

The aim of the study is to determine the variables that can predict the outcome of successful delivery in women who were induced with a single previous caesarean section scar.

Materials and Method

Retrospective cohort study of all patients with previous caesarean section who were been induced during 2000-2011 at St George's Hospital, London. Maternal age, BMI, ethnicity, smoking status, and indication for the previous caesarean section, Bishop Score at first examination and Mode of induction were compared between women who had a successful vaginal delivery and those who had an emergency caesarean section after attempted induction of labour.

Results

A total of 372 women were included in the study, 230 had successful vaginal delivery (61.8%) while 142 (38.2%) had an emergency caesarean section. Caucasians constituted the largest ethnic group in women who had a successful vaginal delivery (43%) whereas higher proportion of mixed ethnic group was seen in unsuccessful group (26.8%). There were no statistical differences seen with regard to smoking, BMI, maternal age, Gestational age, medical complications of pregnancy, gender of the baby between the groups.

Birth weight in the successful VBAC group (3164±995.7) was found to be lower than the mean birth weight (3367±678) of the unsuccessful VBAC group and this was statistically significant (p=0.033). Although, the proportion of unsuccessful VBAC was found to be higher in male fetuses, (61.3% vs. 52.2%) this observed difference was not statistically significant (p=0.086).

Mean Bishop score at induction in the successful VBAC group (4.18 ±2.058) was higher in comparison to unsuccessful group (3.25+ 1.99) and this was statistically significant in (p =0.001). Specifically, cervical length and cervical dilatation at first examination were found to be statistically significant between two groups.

Number of previous successful vaginal deliveries was also found to be a significant predictor between two groups (p =013). Use of prostaglandins was significantly associated with the unsuccessful VBAC while artificial rupture of membrane with syntocinon and mifepristone and misoprostol were significant mode of induction in successful VBAC (p=0.001).

Failure to progress in first stage FTP (38.7%), pathological CTG (20.4%) and failed induction (30.3%) were the major reason for cesarean section in unsuccessful VBAC. The incidence of scar rupture was x in successful and y in the unsuccessful group

Conclusion

Our 10 year analysis in a tertiary referral centre suggests that Bishop score (especially cervical length, cervical dilation at first examinations), number of previous vaginal deliveries, feral weight in current pregnancy were found to be important predictors determining the success or failure in induction of labour with previous history of caesarean section. However, the risk of scar rupture (0.5%) was less than previously reported rate (2.4%) for induction of women with a previous uterine scar.

Key words: caeserean section ,Induction of labour,Bishop score

Presenter name: Dr S Muhammad

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SHOULDER DYSTOCIA: OBSTETRIC MANOEUVRES AND ITS MORBIDITY.

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Introduction

Shoulder dystocia (SD) is known for being an unpredictable and unpreventable event and associated to substantial morbidity to the mother and neonate. The aim of this study was to determine the incidence of SD in a tertiary care hospital and the morbidity according to type of manoeuvres (McRoberts maneuver and suprapubic pressure versus rotational maneuvers or delivery of the posterior arm) used to resolve the dystocia.

Materials and Method

This was a prospective cohort study of pregnancies complicated with SD carried during two years and half period. Maternal characteristics, duration of second stage of labor, type of delivery, fetal weight, neonatal morbidity (Apgar score <7 at 1st minute, type of injury, neonatal intensive care unit admission) and maternal morbidity (3rd or 4th degree laceration, cervical tear, post-partum hemoglobin < 8g/dL, perineal haematoma, post-partum fever, dehiscence of episiotomy) were collected. According to the maneuver performed, data were compared using Chi-square test, Fischer exact test or Student t test, as appropriate. A p-value of <0.05 was considered significant.

Results

During the study period 123 (3.2%) pregnancies were complicated with SD. Baseline patient characteristics for age, parity, BMI, weight gain did not vary significantly according to type of maneuver. Rotational maneuvers and delivery of the posterior arm were associated to longer second stage of labour (60 min (IQ: 45 -96) vs 45 min (IQ: 25 - 60), p=0.005) and increased neonatal (44.19%) and maternal (32.56%) morbidity, p=0.04 and p=0.007, respectively.

Conclusion

Although rare, SD is associated to increased neonatal and maternal morbidity, specifically when rotational manoeuvres and delivery of posterior arm are used.

Key words: shoulder dystocia, obstetric manoeuvres, maternal morbidity, neonatal morbidity

Presenter name: Maria Carvalho Afonso

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Oral and vaginal misoprostol - pros and cons for birth induction

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Introduction

Introduction: Misoprostol is a popular and frequently used drug for birth induction, but still there is no united guidelines of input type and frequency. It is very important to compare oral and vaginal ways of administration with the aim of creating guidelines of birth induction to make the process more safer and efficient.

Aim: To clarify clinical differences between using oral or vaginal input type of Misoprostol for birth induction.

Materials and Method

It was prospective study in which 210 women with term pregnancy, who were hospitalized in Riga Maternity Hospital with indications for birth induction from January 2014 to August 2014, was enrolled. Patients were divided in two groups according to numbers of their medical history, in order the distribution not to affect the results of the study. In study group 99 patients received Misoprostol orally, control group consisted of 111 patients who received Misoprostol vaginally. Clinical data were collected from medical documentation and patient questionnaires. Programs R and LibreOffice Calc for statistics were used and P value <0,05 was considered statistically significant. Study was ethically approved by Riga Stradins University.

Results

The mean age of study and control groups was 28.5 and 28.7 years. There was found no statistical difference between the groups in the parity, body mass index, Bishop scale evaluation as well as in the indications for birth induction. By contrast results show that patients in study group received Misoprostol more frequently - 3 times vs. 1.2 times ($p < 0.05$) and had longer time period from start of the induction to beginning of contractions- 509 minutes vs. 390 minutes.

Comparing data from delivery we found that the groups did not differ in a percentage of forceps and vacuum extractions applied and episiotomy rates (5% vs. 4% and 7% vs. 5%), minimal difference was found in the need for oxytocin use in childbirth - 46% vs. 42%.

However, we found that cesarean delivery were more frequent in the control group (14% vs. 19%; $p < 0.05$). Neonatal Apgar score were similar in both groups.

Conclusion

Oral way of Misoprostol administration is an alternative for vaginal administration. Oral Misoprostol administration is associated with higher costs and longer induction time. Oral Misoprostol administration has the potential to reduce the number of cesarean sections for induced patients. Fore more complete data obtaining it is necessary to continue the research.

Key words: Misoprostol, birth induction

Presenter name: Vita Začesta

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Delivery route in adolescents in Sao Miguel Island

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Introduction

Adolescent pregnancy is one of the most important problems in health care systems. It is a complex issue with many reasons for concern, such as psychological, developmental or economical. In this age group there are conflicting studies about the common way of delivery route.

The objective of this study was to perform a comparative analysis about the delivery route between general population of pregnant women and adolescents of Hospital Divino Espírito Santo of Ponta Delgada, in São Miguel island. Secondly, it was compared the delivery route between adolescents in spontaneous labour and in labour induction.

Materials and Method

A retrospective comparative study was conduced during 12 months to evaluate the delivery route between general population of pregnant women and adolescents (delivery age until 19 years old). In second place, it was analysed the same purpose between adolescents in spontaneous labour and in labour induction.

Results

During 2014, 1452 deliveries occurred in Hospital Divino Espírito Santo of Ponta Delgada. One hundred and three births were from pregnant teenagers and corresponded to 7% of total deliveries.

The delivery route in general population of pregnant women was eutocic in 50.3%, by vacum extraction in 14,4%, by forceps 0,7% and by cesarean section in 34,6%. In adolescents' population, the delivery route was eutocic in 50.5%, by vacum extraction in 20,4%, by forceps 1,9% and by cesarean section in 27,2%. In adolescents group, 70 deliveries resulted from spontaneous labour, 30 from induced labour and 3 from elective cesarean section. The delivery route in spontaneous labour was eutocic in 62,9% (p=0.000), by vacum extraction in 21,4%, by forceps 2,9% and by caesarean section in 12,9%. The group of induced labour, the delivery mode was eutocic in 26,7%, by vacum extraction in 20%, by forceps 0,7% and by cesarean section in 53,3% (p=0.000). The elective procedures were due to pelvic presentation and to HIV false positive.

Conclusion

In this study, eutocic deliveries were found in the same proportion (50%) between general population of pregnant women and adolescents. When we compared caesarean section between these two groups, we confirmed less 7,4% of this procedure in the adolescent group. We also conclude that forceps deliveries were two times superior in adolescents.

The second purpose of this study was to analyse the differences in the delivery route between pregnant adolescents in spontaneous labour and in labour induction. We found that eutocic labour was 2,4 times superior in the spontaneous labour group, but caesarean section was 4 times superior in the induced labour group.

Key words: Adolescents; Delivery route

Presenter name: Bruna Melo

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A cross-sectional study of postpartum perineal pain on women's ability to perform daily activities after normal birth

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Introduction

Postpartum perineal pain is commonly reported after normal birth. This is often associated with the birth-related perineal trauma and makes women's ability to walking, sitting down and sleeping, difficult. This study aimed to identify the association between perineal pain intensity and its interference levels on women's ability to perform daily activities.

Materials and Method

A cross-sectional study with a sample size of 228 postpartum women undertaken in São Paulo city, Brazil. We included women up to 24 hours after normal birth, who have not received epidural analgesia during the labour and with no clinical or obstetrical complications. Perineal pain severity was measured by using the Numeric Pain Scale (0-10) and rated as being mild (1-3), moderate (4-6) and severe (7-10). Activities such as walking, sitting down, breast-feeding, sleeping, urinating and infant care were explored. Pain interference levels on these activities was assessed by using a numeric scale (from 0 to 10 being 0 = no interference and 10 = maximum interference). The analysis of variance with post hoc Tukey-HSD method, with significance level of 5% was applied.

Results

The participants aged in average 24.4 ± 5.6 years. Most of them were primiparous (62.7%), mixed ethnicity (51.8%) and lived together with their partners (78.4%). The majority of them had perineal trauma: 1st degree laceration (35.2%), 2nd degree laceration (7.9%) and episiotomy (34.8%). Almost all participants received analgesic drugs (97.8%) after childbirth and perineal pain intensity was scored as being mild (28.9%), moderate (55.3%) and severe (15.8%). Women who reported severe perineal pain experienced higher levels of pain interference on daily activities performance (6.5 - 7.5) followed by those with moderate (4.9 - 6.1) and mild pain (3.6 - 4.5). All activities were significantly limited by the perineal pain. Walking ($p < 0.001$) and sitting ($p < 0.001$) were associated with all pain intensities. Sleeping ($p = 0.019$) and infant care ($p = 0.027$) were significantly associated with mild and severe pain, while breastfeeding ($p = 0.001$) and urinating ($p < 0.001$) were associated with mild pain.

Conclusion

Perineal pain is an unpleasant experience that limits women's in their ability to walk, sit down, sleep, urinate breastfeed and take care of their babies. The higher the intensity of pain more discomfort in undertaking activities of daily living.

Key words: Pain. Perineum. Postpartum period.

Presenter name: Sonia M. J. V. Oliveira

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: Induction of labour in women with previous caesarean section is it safe?

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Introduction

Caesarean birth is increasing worldwide approximately 25 % of all the births in UK. Women with a previous history of scarred uterus are at higher risk of maternal and fetal complications including scar rupture, postpartum haemorrhage, blood transfusion, intensive care admission and peripartum hysterectomy. Neonatal complications include Hypoxic Ischemic encephalopathy, Neonatal intensive care admission and increased mortality.

Prospective and cohort studies have shown an increased risk of uterine rupture in women with previous caesarean section who had an induction with prostaglandins.

Usage of oxytocin to induce labour in this group is also associated with an increased risk of rupture.

Objective of the study was to determine Maternal and fetal outcomes in women with previous caesarean section who were induced with Prostaglandins or Oxytocin.

Materials and Method

Retrospective ten year cohort study of all women who were been induced with Prostaglandins,Oxytocin or Misoprostol for different indications at gestational age of 24-42 weeks at St Georges hospital with a previous history of caesarean section. Outcomes were measured in terms of success, scar rupture, scar dehiscence, Post partum haemorrhage,ITU admission, blood transfusion, adjacent organs injury ,hospital stay and endometritis.

Neonatal outcomes included HIE, NNU admissions, Apgar score and neonatal mortality

Results

Total 372 women were recruited for the vaginal birth after caesarean section (VBAC). Out of 372 women, 230 (61.8%) had a successfully delivered vaginal delivery (SVD) while 142 (38.2%) had a failed IOL and had an emergency caesarean section (CS).(p=0.001).

PG prostaglandin mode of induction was significantly associated with the unsuccessful VBAC while artificial rupture of membrane with syntocinon and mifepristone and misoprostol were significant mode of induction in successful VBAC (p=0.001).There was no significant impact of reason for starting syntocinon on the outcome of VBAC (p=0.281).

There was a significant proportion of operative complications in unsuccessful VBAC(angular tears ,PPH) than successful VBAC i.e. 12.1% vs. 3.9% (p=0.003). The proportion of blood transfusion was statistically similar in successful versus unsuccessful VBAC groups i.e. 5.2% vs. 4.2% (p=0.665).

The proportion of HDU/ ITC admissions was higher in successful VBAC as compared to unsuccessful VBAC however, this difference of proportions was not statistically significant (p=0.162).

The proportion of PPH was higher in successful VBAC group than unsuccessful VBAC i.e. 3% vs. 0%, however this difference was not statistically significant (p=0.080).

Failure to progress in first stage FTP (38.7%), pathological CTG (20.4%) and failed induction (30.3%) were the major reason for caesarean section in unsuccessful VBAC.

The mean apgar scores at 1 minute and 5 minutes were significantly higher in unsuccessful VBAC group (p=0.001).

There was no cases of HIE in our series.

Scar rupture was 0.5 % while scar dehiscience rate was 1.075 %,none of the patient in our series had a hysterectomy

Conclusion

Induction of labour with Prostaglandin and oxytocin can be safely done in settings where adequate monitoring facilities and skilled staff is available to deal with an emergency. Our rate of scar rupture for induced labour in women with a previous caesarean scar is comparable to the reported rate in spontaneous labour

Key words: Induction of labour, Uterine rupture, Prostaglandins

Presenter name: S Muhammad

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INTRAPARTUM COLLISION OF DICHORIONIC TWINS

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Introduction

The true incidence of twin entanglement and interlocking nowadays is unknown.
Nissen classified in his original paper the four types of twin entanglements as: collision, impaction, compaction and, least frequently, interlocking. Collision, the most common type of entanglement, involves the contact of fetal parts of both twins with each other, preventing engagement of either. With impaction, there is indentation of any fetal part of one twin on the surface of the second twin, giving partial engagement of both simultaneously. And finally, with compaction one has the simultaneous full engagement of the leading fetal poles of both twins, filling the true pelvis, and preventing further descent or disengagement of either twin.

Materials and Method

I present a case report of a collision of dichorionic twins.

Results

A 31 years old primigravida with dichorionic twins reached the labour ward due to leaking of amniotic fluid at 8 p.m. on February 6th, 2015.
The gestation age was 37 weeks and 1 day. Both twins were in cephalic presentation.
The last ultrasound examination, done on February 2nd, showed that the estimated weight of the first twin was 2800 grams and the second twin was 2500 g. No intrauterine growth retardation was noted.
The contractions started spontaneously two hours after arriving at the hospital. ST analysis of the first twin + external CTG monitoring of the second twin started at cervical dilation of 3 cm. Intravenous oxytocin was admitted when cervix was 5 cm open and the interval of uterine contractions was every 5 minutes.
Descent on the second twin was noted during the first period of delivery. The active pushing period of 3 hours resulted in no descending of the head of the first twin through the pelvis. Transabdominal ultrasound showed the head of second baby lower and the right shoulder of the first baby higher in the uterus. A Caesarean section performed. The second twin with a birth weight of 1796 grams and Apgar score of 7 was delivered first. The head of the second twin was located at the level of inlet of pelvis and had been in collision with the right shoulder of the first baby. The first baby with a birth weight of 2906 grams and Apgar score of 4 was delivered then.
The total blood loss during the surgery was 400 ml. The mother was transferred to the pediatric ward on the fourth day after the delivery with both babies in good condition.

Conclusion

Collision of twins was diagnosed during delivery by clinical signs and by ultrasound examination. Vacuum extraction was avoided and babies in good condition were delivered by Caesarean section. The probable predisposing factor of the collision was the remarkable growth retardation of the second twin.

References:

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Key words: twin entanglement
Presenter name: Fred Kirss

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HELLP at 22 weeks

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Introduction

HELLP syndrome occurs in approximately 0.2 to 0.6 percent of all pregnancies. In comparison(2), preeclampsia occurs in 5 to 7 percent of pregnancies(2). Superimposed HELLP syndrome develops in 4 to 12 percent of women with preeclampsia or eclampsia(2). When preeclampsia is not present, diagnosis of the syndrome is often delayed(3).

The risk factors for HELLP syndrome differ from those associated with preeclampsia. The syndrome generally presents in the third trimester of pregnancy, although it occurs at less than 27 weeks of gestation in an estimated 11 percent of patients(4). The syndrome presents antepartum in 69 percent of patients and postpartum in 31 percent of patients(1).

Our case is about a 22 weeks primigravida who presented to A&E with severe PET symptoms and was found to have HELLP syndrome.

Materials and Method

N/A

Results

Thirty Two years old, 22 weeks pregnant Primigravida. She presented to A&E with severe epigastric pain only. At that stage, she had no any other symptoms. She is not known to suffer from gallstones or peptic ulcer disease. She is known Asthmatic and suffers from Depression/Anxiety. She is on Sertralin. She has got a strong family history of type 2 Diabetes Mellitus and hypertension from both sides. Her booking blood pressure was 120/70.

On examination, BP 170/95. The remaining of her observations was all normal. She had an epigasrtic tenderness with no other abnormality detected. Her reflexes were normal.

She was given a stat dose of 200 Labetalol and she was admitted to the Obstetric ward. She was started on regular Labetalol, Thromboprophylaxis and Aspirin.

Blood results showed Hb 111, Platelets 151(456 at booking), ALT 102 and Coagulation profile was normal. Urine PCR was 24(Normal).

Liver screening was later performed and showed increased level of LDH only.

Two days later, her blood pressure started to rise again and her platelets count dropped to 86, Hb dropped to 106 & ALT count rose. She was transferred to HDU in main delivery unit and she was started on Magnesium Sulphate, IV Labetalol and Hydralazine. Her blood pressure has been controlled few hours later. She had liver and upper abdominal USS which was unremarkable.

USS showed that the foetus was small for dates and Doppler's were normal.

Her blood pressure was stabilized and she was switched to oral Labetalol and Nifedipine.

At this stage Medical TOP was discussed with patient. Patient wanted to discuss it with partner. Her bloods the next morning showed that her platelets count has increased and her ALT has dropped, her Hb remained stable. It was agreed at this stage to continue with pregnancy and watch for worsening of symptoms or HEELP.

Steroids given at 23 weeks.

At 23 weeks + 1 day, her epigastric pain has settled, BP remained stable. Follow up dopplers remained normal.

At 24 weeks + 1 day, she was discharged home with daily BP check in the community and weekly consultant antenatal visit.

At 25 weeks, she was referred from the community with high BP. She had epigastric pain and headache. Her Bloods showed worsening Platelets and ALT count. It was discussed with Haematology team and they suggested to give further dose of steroids. The next day her blood picture has started to improve and she remained stable.

At 25 weeks + 4 days, USS showed intermittent absent end diastolic flow.

She was having daily Doppler USS which remained stable.

At 26 weeks + 1 day, USS Doppler showed intermittent absent EDF with intermittent reversed EDF. It was decided that she is for delivery and it was discussed with the patient.
At 26+2 a live female infant was delivered by C/S and she was transferred to NNU.
The patient had a normal post operative recovery and she continued on Labetalol and Nifedipine for three weeks post delivery. Her bloods 2 weeks after delivery were normal.

Conclusion

1) HELLP syndrome can occur as early as 22 weeks in pregnancy.
2) Apropraite management of HELLP syndrome can lead to overtake the pregnancy to the viability gestational age if the clinical picture of the patient allows.

Key words: N/A
Presenter name: A Ahmed

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FACING RISING CESAREAN SECTION RATES: SPONTANEOUS OR INDUCED LABOUR?

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Introduction

Literature has provided contradictory information about the use of labour induction and the risk of cesarean delivery. The aim of the study was to determine the rate of cesarean section (CS) associated with induction of labour (IOL) compared with spontaneous onset of labour in our obstetric population. The effects of maternal-fetal characteristics were also analyzed.

Materials and Method

Population-based retrospective study that included all women with a viable singleton fetus who gave birth at our Hospital between January 1st of 2010 and December 31st of 2014 (5 years). Patients who were not candidate for a trial of labor (TOL) and underwent a CS, either elective or urgent, were excluded. All data was collected from a computerized database of all the deliveries; the information is captured from the patient's medical records.

Results

The study population consisted of 10041 women: 138 twin pregnancies and 1002 women who were not candidate for a TOL were excluded; and 8901 (88,65%) met the inclusion criteria. Of these, 5600 (62,91%) had an spontaneous onset of labor and 3301 (37,09%) had an IOL. 1463 cases of post-dates pregnancy (44,32%) and 1190 ruptures of membranes before labour (36,05%) were the main indications for IOL. Women with IOL had a higher mean maternal age and higher rates of: post-dates pregnancy (33,99% vs 1,86%), babies with birth weight above 3500g (30,48% vs 24,61%) and nulliparity (60,41% vs 51,02%), in comparison with patients who had a spontaneous TOL.

IOL group had a higher rate of CS (24,48% - 808/3301) than women with spontaneous onset of labour (15,16% - 849/5600). In the subgroup analysis by parity, both nulliparous and multiparous had a higher rate of CS with IOL [30,59% (1994/3301) vs 20,34% (2857/5600) and 15,15% (1307/3301) vs 9,77% (2743/5600)]. Analysis regarding relation between labour onset and indications for CS, revealed nonreassuring fetal tracing as the major indication for both groups – spontaneous deliveries, 41,11% (349/849); and induced labour, 43,56% (352/808). Subgroup analysis by indication for induction consistently showed lower rates of CS vs higher rates of vaginal birth for all medical indications.

Conclusion

Overall, the rate of CS was higher with IOL than with spontaneous labour. Nevertheless analysis regarding indication for induction showed an universal reduction in CS rates. Conflicting data from literature reinforce that these findings have implications for our obstetric population and that additional trials are needed.

Key words: Labour onset; Labour induced; Cesarean section

Presenter name: F. Reis

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INTRACEREBRAL HAEMORRHAGE IN PREGNANCY: A CASE REPORT

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Introduction

Intracerebral haemorrhage (ICH) is a potentially life threatening condition for pregnant women. Causes are usually attributed to either arterio-venous malformation (AVM) or aneurysmal rupture, although in a significant number of cases the aetiology remains unknown. Pregnancy seems to be associated with an increased risk for ICH, and this may be partly due to the haemodynamic and hormonal changes of pregnancy – in fact, it is responsible for 5-12% of all maternal deaths and accountable for considerable morbidity. Known risk factors for ICH in pregnancy include advanced maternal age (>35 years), pre-existing hypertension, gestational hypertension and (pre-)eclampsia. The most common presenting symptom is either an altered conscious state or a sudden onset intense headache. The management of ICH should be based on neurosurgical criteria, and delivery decided on obstetric reasons.

Materials and Method

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Results

33 year old MP, Gravida 2 Para 1, with a history of lower limb vascular insufficiency medicated with low molecular weight heparin (prophylactic) had an uneventful pregnancy followed up with her primary care doctor until 39 weeks. At this time she complained of a sudden onset intense headache and was found collapsed by her husband. She was brought in by ambulance with a GCS of 4 on arrival (O1V1M2), with a normal blood pressure. CT scan of the head revealed a large acute parenchymal haematoma (65x47mm), with moderate ventricular dilatation and midline shift. Together with the neurosurgical team it was decided that delivery was necessary followed by haematoma drainage – she was submitted to caesarean section with delivery of a new-born weighing 3440 gr, Apgar 7/9/9. The patient had a decompressive craniectomy, uneventful total haematoma evacuation and external ventricular drainage placement. She had fixed dilated pupils at the start of the surgery that were reversed. Intraoperatively no AVM or tumor was found. The newborn was discharged at day 3. Day 25 after decompressive craniectomy, MP still has not had any improvements in neurologic function.

Conclusion

ICH is an unpredictable event responsible for a considerable proportion of maternal deaths. Although it can be related to hypertension (be it chronic, gestational or related to pre-eclampsia), many cases arise in normotensive pregnant women, usually related to either AVM or aneurysmal rupture. With a considerable morbidity and mortality rate for both mother and foetus, a multidisciplinary approach is warranted for prompt diagnosis and management in order to improve outcome. In our case foetus was delivered immediately by caesarean section and was discharged home at day 3; mother remains an inpatient with no improvement in neurologic function.

Key words: Intracerebral hemorrhage, pregnancy, craniectomy.

Presenter name: Joana Figueiredo

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REDUCING OF INTRA AND POSTOPERATIVE OBSTETRICAL HAEMORRAGES DURING CESAREAN SECTION

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Introduction

The problem of the reducing of the haemorrages during the abdominal delivery is more actual of obstetrics. As shown as the indices of maternal mortality, obstetrical hemorrhages are still taking a leading place among the its causes. It's more actual the problem of intraoperation haemostasis, which it's inferiority sometimes leads to the relaparotomy with performing of hysterectomy, thus significantly increases of the risk of the maternal mortality in consequence of its traumatism.

Materials and Method

To reducing of blood loss and related with these repalarotomy at abdominal delivery, there were observed 23 pregnant women (1st group), which delivered by cesarean section. Control group consisted of 12 women operated by identical indications and they are not differed from 1st group. Control group (n=11) were choose by retrospective analyze by the blind randomization with the identical indications to the operation as a 1st group.

Results

Indications to the abdominal delivery were heavy pre-eclampcia, circulation failure II-III degree by NYHA accompanied with cardiac rhythm disorders on various characters, premature abruption of the normally situated placenta, obstructive labor. Operation performed emergency, and characterized with uterine hypotonia and increased blood loss. In women form 1st group there were interoperation applied developed method of at the our Center - system haemostatic preparation tranexam acide in dosage 250-500 mg intravenously, supported normal body temperature for the saving of coagulation system potential, warming of infusion solutions up to 240C, applying of backpack suture on uterine with tying of both uterine arteries. Before the ending of the operation conducted control of condition of coagulation system. In cases of gypocoagulation or revealing of the signs of continuing bleeding closing of surgical wound performed after correction of coagulation. In two cases preformed tying of the internal iliac arteries. On applying this blood saving methodic there were obtained significantly reducing of blood loss at abdominal delivery in 1st group patients. So, in observed group blood loss volume consist 850±0,21 ml, and control group It was 1250±0,11, medium meaning of haemoglobin prior to operation in patients from 1st group was - 94,5±0,9 gr/l, in control group 86,5±0,8 gr/, on the 3rd day of the postoperative period the meaning of haemoglobin in 1st group was - 91,5±0,9 gr/l, in control group 86,5±0,8 gr/l ($p \leq 0.005$). In control group there occured two cases hysterectomy with relaparotomy, 4 cases haemotransfusion.

Conclusion

Applying of developed algorithm of maintenances at cesarean section in women with uterine hypotonia and increased blood loss contributes to the reducing of complications related with the haemorrages.

Key words: haemorrhage, cesarean section

Presenter name: Rustem Yusupbayeb

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ABDOMINAL DELIVERY IN PREGNANT WOMEN WITH THE CARDIAC PATHOLOGY ON REDUCING OF MATERNAL MORTALITY

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Introduction

Cardiovascular diseases (CVD) are the most frequent pathologies, complicating pregnancy, childbirth and the postpartum period, which leads to the maternal morbidity and mortality.

Materials and Method

For optimization of methods of delivery in women with heart disease in order to reducing of maternal mortaliyu and morbidity 50 pregnant women with cardiac disease which delivered in Republican specialized scientific-practice medical center of obstetrics and gynecology were under observation.

Results

All of them had of rheumatic heard diseases complicated with the circulation failure by New York heart assosacion (NYHA) I-III degree and cardiac rhythm disorders on different character with clinical manifestation. All pregnant women were divided into two groups depending on the mode of delivery. The main group (1st group) were consisted of 27 parturient women with circulation failure at II-III on NYHA which delivered by cesarean section. 23 parturient women (2nd group) with circulation failure on I-II stages by NYHA with vaginal delivery were included to the comparison group. All observed women from both group were not differed between each other them by age and parity. Delivery methods choose based on cardio-vascular system condition, degree of manifestation of hemodynamic disorders. Vaginal delivery was performed in women just after determining of reserve possibilities of cardio-vascular system by the functional tests: step test, nitroglycerin test and estimation of coronary reserve. Central hemodynamic were evaluated by the method of echocardiography observation, studied index of left ventricle capacity, double creation, heart beat and cardiac index, besides, determined proportion of value of heart beat volume (HBV) and cardiac minute capacity (CMC) to the body volume (S). Results. Pregnant women from the 1st group were underwent regional anesthesia during cesarean section. The labor at women from 2nd group performed under longitudinal epidural anesthesia. To the end of first period of labor the pulse, double creation, breath rate were significantly increased from their initial value on 9,8; 30,8 and 19,3% accordingly. At the second period of labor heart beat rate, medium diastolic pressure and double creation on the arrival of stay significantly high from their initial value and previous stage on 23,1-10% ($p<0,001$), and SpO2 was lower accordingly on 3,5-3,9%. Thus, despite of in patients from 2nd group the labor was proceeded under the valuable anesthesia, there were notice an expressed exertion of compensation of circulation and respiratory system. Conducting comparative estimation of changes of some indicates of main system of life support at both group, it's approved, that thee are no significant changes in hemodynamic and respiratory system during abdominal delivery. Received dates allow confirming, that in cases of reducing of reserve capabilities abdominal delivery is defensible method and it has preference before vaginal birth in women with circulatory failure (NYHA) accompanied with arrhythmia.

Conclusion

Changing of some parameters of main system on continuously monitoring of hemodynamic on stages of abdominal delivery at parturient women from 1st group indicate, that during the performing of cesarean section under the regional anesthesia, there are no significant changes at studied parametres. At the time, in women with vaginal birth there were registered significant hemodynamic changes at the second period of labor which partial remained during the puerperal period

Key words: ceazeran section, cardiac diseases

Presenter name: Rustem Yusupbayev

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Botllefeeding: is it really a choice? Indentifying predictors of bottlefeeding and early breastfeeding discontinuation.

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Introduction

Despite breastmilk being recognised as the best form of infant feeding, bottlefeeding rates in the United Kingdom (UK) are still among the highest levels in the world. What would make a woman opt for bottlefeeding despite widespread information that “breast is best”?

All over the world, an abundant body of research examined predictors of breastfeeding but little attention has been paid to bottlefeeding determinants. This study investigates socioeconomic, family related, pregnancy and delivery related factors and bottlefeeding in the UK going further ahead and examining whether there are differences between the mothers that bottlefeed from birth, and those who attempt breastfeeding but give up early on.

Materials and Method

A secondary analysis of the Infant Feeding Survey (IFS) 2010 was conducted to examine the above relationships at two different time points: bottlefeeding at birth (n=15174) and early breastfeeding discontinuation (bottlefeeding at 5-10 weeks post birth, n=11795). Inferential statistics followed by logistic regression analysis was used to identify predictors of bottlefeeding at both points in time, adjusting for remaining factors.

Results

Bottlefeeding from birth is predicted by a range of independent social disadvantages: young age, being single, not working, being white British, having low levels of education, but also by other characteristics such as having more than one child, having a cesarean section, no health problems post delivery and having friends who bottlefed their babies. Early breastfeeding discontinuation is predicted by almost the same independent determinants except for: working in intermediate or routine/manual occupations, having friends that mix feed, and developing health problems post birth.

An observation of note is that age alongside ethnicity, socioeconomic classification, education and peer influence are the strongest independent predictors for both objects of study.

Conclusion

The context in which mothers grow, live, work and age is a key determinant on how they end up feeding their babies. For many women, both the decision to bottlefeed from birth or discontinue breastfeeding is not an option. For those young mothers, not having role models, not having positive breastfeeding experiences, not having a supportive partner, not having a good socioeconomic position or good education, is it really a choice?

Implications for practice:

A “one-size-fits-all” approach for increasing the breastfeeding rates will not have the recommended outcome of six months exclusive breastfeeding for all babies as hospitals care for mothers with very different social backgrounds. The creation of a clear national breastfeeding policy and strategy as a priority to address the low rates of breastfeeding in the UK is crucial, however not at the level of the practitioners. Maternity teams should focus on their population specific needs by developing programmes in accordance to the mother's characteristics, aiming at supporting those who initiate and may be at risk of early discontinuation but also trying to change the bottlefeeding culture making breastfeeding the norm.

Key words: Bottlefeeding, Early Breastfeeding Discontinuation, Predictors, Socioeconomic background

Presenter name: Andreia Goncalves

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Induction of Labor With Vaginal Misoprostol 25µg Versus Dinoprostone Vaginal Insert – An Observational Study

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Introduction

A new protocol of labor induction with vaginal misoprostol 25µg was implemented at Centro Hospitalar São João on July 2014. Previously, dinoprostone vaginal insert 10 mg was used. The aim of the study was to compare the effectiveness and safety of vaginal misoprostol with dinoprostone vaginal insert for induction of labor, in term pregnancies with Bishop score lower than seven.

Materials and Method

An observational study was conducted, including two consecutive samples of term pregnancies with indication for labor induction and Bishop score lower than seven. Group I included all women who received a misoprostol 25µg tablet vaginally at every four hours, for up to six doses (n=56), after July 2014. Group II included a consecutive sample of women who received dinoprostone vaginal insert before vaginal misoprostol regimen introduction (n=76). Although misoprostol regimen was recommended as the first choice after its implementation, the proportion of inductions with this method during the study period was 57,7%. In order to assess an indication bias, group III included all inductions with dinoprostone after July 2014 (n=41). Maternal outcomes such as mode of delivery, induction to delivery interval, uterine tachysystole/hypertonia and postpartum hemorrhage; and fetal outcomes such as Apgar score and Neonatal Intensive Care Unit admissions (NICU) were compared in the three groups. Data was retrieved from the obstetrical databases OBSCARE and OmniviewSisPorto 3.5. Statistical analysis was performed using student t-test, chi-square test and adjusted odds ratios calculated with logistic regression analysis.

Results

There was no significant difference in the mean induction to delivery interval in groups I, II and III (27.2±1.5 hours in Group I, 24.9±1.7 hours in Group II and 25.4±2.0 hours in group III, p=0.208), cesarean section rate (32.1%, 30.3% and 31.7%, respectively; p=0,685), and in the proportion of deliveries within 12 hours (5.4%,19.7% and 17.7%, respectively; p=0.058). After adjusting for gestational age, number of previous gestations and body mass index, those induced with dinoprostone were more likely to deliver within 12 hours (Group I: reference; Group II OR=4.5, CI95%: 1.06-19.1 and group III OR=5.2, CI95%: 1.10-25.4). Uterine tachysystole/hypertonia was significantly more frequent with misoprostol (33,9%, 11,8% and 22,0%, respectively). No significant differences were found in newborn Apgar score lower than 7 or NICU admissions. However, a higher rate of postpartum hemorrhage was observed in misoprostol group (7.1% in group I and none in groups II and III, p=0.003).

Conclusion

Compared to dinoprostone insert, labor induction with vaginal misoprostol in a low-dose regimen was associated with a lower rate of deliveries within 12 hours, higher rate of uterine tachysystole/hypertonia and postpartum hemorrhage.

Key words: Induction of Labor; Misoprostol; Dinoprostone

Presenter name: Joana Moreira Barros

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Effects of the Consumption of Green Tea on the Newborn Heart Muscle Cells

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Introduction

As well as the many known benefits of green tea, it has been seen that chronic consumption can also cause harm. In particular, it has not yet been explained why its consumption during pregnancy can result in side effects on the fetus. In this study, an investigation using immunohistochemical methods was made of apoptopic (cell death) changes in the heart tissue of new-born rats which may be caused by green tea extract applied throughout pregnancy.

Materials and Method

Eighteen female albino Wistar rats were used in the study. At an appropriate time in their cycle, all the female rats were left for one night in a cage with male rats. The next day, vaginal smears were taken to ascertain whether they had copulated. Then they were divided into two groups. The first group was a control and the second were given green tea (50 mg/kg, green tea extract, 21-day gavage). At the end of 21 days of pregnancy, the heart of the newborn rats in both groups were dissected on the first day after their birth. The heart tissue obtained was subjected the TUNEL method and the immunohistochemical method with caspase-3, capase-9 and cytochrome-c antibodies.

Results

It was found that the number of TUNEL positive cells in the green tea group, especially in the muscles of the atrium, was higher than in the control group. In immunohistochemical evaluation, a weak caspase-3 and cytochrome-c cycle was observed, and caspase-9 varied from weak to medium. In the green tea group, the caspase-3 immune reaction was of medium intensity, while the caspase-9 and cytochrome-c reactions were very strong. It was noticeable that there were apoptopic immunoreactions in both groups, especially in the atrium region.

Conclusion

Consumption of green tea during pregnancy is a cause of an increase in cell death in the newborn heart, especially in the cells of the heart muscles of the atrium. In particular, the increase in cytochrome-c in the green tea group shows that the mitochondria play a clear role in the apoptopic signal. It is felt that increased apoptosis in the hearts of newborns in connection with the consumption of green tea may cause heart disease at a later age.

Key words: Green tea, heart, TUNEL, caspase-3, caspase-9, cytochrome-c

Presenter name: S.I.Calim

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Vacuum-assisted vaginal delivery five variables to evaluate at debriefing

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Introduction

Introduction: The Kiwi OmniCup is an efficient device for vacuum-assisted vaginal delivery, provided it is used appropriately (according to Vacca's method), including identifying the fetal head position (FHP) and the flexion point.It is equally important to conduct audits to understand what are the variables associated with maternal and neonatal outcomes or with a possible suboptimal technique's implementation.

Materials and Method

Materials and Methods: We analyzed a cohort of vacuum-assisted vaginal deliveries for the years 2012 and 2013 in a hospital with a tradition of teaching of obstetric practice. Each day two operators, blinded to the outcome of the delivery, analyzed each case of vacuum use for the previous 24 hours using five variables: main indication for the application (fetal hearth rate non reassuring, failure to progress, maternal indications), operator experience, fetal head station (FHS), FHP at vacuum application. The main outcomes were adverse neonatal outcome (ph≤7.10, or Apgar score at 5min ≤7, or shoulder dystocia), adverse maternal outcome (postpartum blood loss ≥500ml ; third or fourth degree perineal tears), and technical or clinical challenges (cup dislodgment and/or failure of the attempt). To evaluate the correlation between the five variables and the outcomes we used Spearman's correlation and multivariable analysis.

Results

Results: During the study period there were 3,926 deliveries with a vacuum delivery rate of 5.6% (222) and a cesarean delivery rate of 14.5%(570). Four cesarean sections were performed for failed vacuum. FHS and FHP at vacuum application were identified and recorded respectively in 213/226 (94.2%) and in 101/226 (44.7%) cases. Adverse neonatal outcome showed a statistically significant association with the indication for the application($p<0.004$) and with the FHP($p<0.033$). Postpartum blood loss ≥500ml was related to the indication for the application ($p<0.01$) instead third or four degree perineal tears did not show association with any of the variables. Cup dislodgement did not show association with any of the variables however fetal head malposition was significantly related to failure of vacuum attempt ($p<0.001$). Interestingly FHS and clinical experience of the operator did not show a significant correlation with any of the variables. The significant correlation between registration of FHP and adverse neonatal outcome persisted at multivariate analysis after correcting for vacuum delivery indication and operator experience (OR 0.19;95% CI 0.04-0.9).

Conclusion

Conclusion: FHP or malposition at vacuum application predicts greater risk of failure of the vacuum attempt as well as neonatal adverse outcome in vacuum vaginal delivery. Our results underline the role of identification of flexion point in operative vaginal deliveries according to Vacca's method. The audit of cases of vacuum in a hospital with a tradition of teaching of obstetric practice underlines the importance of a periodic training regardless of the operator experience.

Key words: Vacuum delivery; Neonatal outcome
Presenter name: A.PINTUCCI

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''Real-time electrohysterography as uterine monitoring technique in clinical practice''

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Introduction

Monitoring uterine activity is indispensable for the evaluation of the fetal condition during high-risk childbirth. Unfortunately, registration with the external tocodynamometer (TOCO) is often inadequate, especially in the increasing obese population.

Real-time electrohysterography (EHG), reporting electrical activity of the uterine muscle, is a potential new non-invasive technique for monitoring contractions during term labour. Recent studies indicate a higher sensitivity for contraction detection than external TOCO, especially in obese women. Validation of EHG is currently being conducted in our hospital. Furthermore, real-time EHG is already being used for uterine monitoring when registration with the external TOCO is poor.

We report our experiences with EHG as an alternative method to monitor contractions of two women during active labor.

Materials and Method

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Results

Case 1

In a 26-year old primigravida, 39 weeks of gestation, oxytocin augmentation was started. As part of continuous cardiotocography (CTG), the EHG-system (Nemo Healtcare, Eindhoven, The Netherlands) was applied, consisting of a single abdominal electrode patch and the PUREtrace module translating the electrical signal into the tocogram, displayed at a CTG monitor (Philips Avalon FM30). At 5 cm of dilatation, a fetal bradycardia emerged. EHG showed a typical pattern suspicious for uterine hypertonia. After a bolus ritodrine was given, the fetal heart rate restored to the baseline. Subsequently, oxytocin was safely restarted which allowed this woman to achieve full dilatation and vaginal delivery of a healthy neonate.

Case 2

Labour of a 32-year old primigravida, BMI 33 kg/m2 was induced at 41 weeks of gestation. After amniotomy, oxytocin was started according to our protocol and continuous cardiotocography was applied. However, the external TOCO showed no uterine activity at all, though this woman did feel contractions. When decelerations became deeper and occurred more often, the midwife decided that this uterine monitoring was unacceptable and applied the EHG system.

This revealed a frequent contraction pattern (≥5-6/10 min), an explanation for the abnormal fetal heart rate pattern. Oxytocin was stopped and labour progressed normally. A healthy infant was delivered without any complications.

Conclusion

These cases indicate that electrohysterography is ready for use in clinical practice as an alternative non-invasive method for uterine monitoring during labor. When external TOCO is inadequate, EHG could provide a valuable tocogram, even in obese women.

Furthermore, we expect that a more accurate monitoring of uterine activity will allow clinicians to optimise contraction patterns by adequate adjustments in oxytocin dosage. This could potentially prevent fetal distress, failure in progress and reduce the cesarean section rate. After validation of this EHG system, a randomised controlled trial is therefore required to assess the effect of EHG on obstetrical and perinatal outcome measurements.

Key words: Cardiotocography, electrohysterography, external tocodynamometer, obesity, uterine contraction, uterine monitoring.

Presenter name: Kirsten Thijssen

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Repeat pyelonephritis during pregnancy, labor and delivery.

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Introduction

The infection of the renal parenchyma occurs in 1-2% of pregnancies; the prevalence increases to 6% in those pregnancies that no screening of symptomatic bacteriuria has been made. The vast majority of pyelonephritis in pregnancy appear in the 2nd and 3rd quarter. In those patients who had asymptomatic bacteriuria, the germ causing the same is usually responsible pyelonephritis.

Materials and Method

Case report: Review of the literature related to the evaluation, clinical diagnosis and treatment of pyelonephritis during pregnancy.

Results

20 year old woman, gravida, bronchial asthma, rest without interest, was admitted on several occasions in our department during pregnancy pyelonephritis for intravenous antibiotic treatment. In all income presented fever 38.3 ° and positive right fist percussion. Investigations: In the first admission, the patient had a positive urine culture for Klebsiella resistant to amoxicillin, gentamicin and tobramycin. In the last income before delivery urine culture tested positive for E. coli. In the analyzes carried out was observed discrete elevated CRP. In renal ultrasound stood right ectasia pielocalicial with bilateral dilatation of the urinary tract distal possibly due to compression by the gravid uterus, no other significant findings. During hospitalization irregular contractions of moderate intensity were recorded. No specifc tocolytic therapy was used, no cervical modifications.

Newborn male at 40 weeks of gestation were found. The patient has not had any episode of pyelonephritis after delivery. Asymptomatic bacteriuria is a risk factor for pyelonephritis, preterm delivery and low birth weight.

Conclusion

In case of recurrent pyelonephritis prophylactic antibiotic treatment should be initiated during pregnancy, childbirth and postpartum (nitrofurantoin 50 mg / 24 h). Nitrofurantoin is associated with minimal risk (0.0004%) of maternal or neonatal hemolytic anemia in persons with G6PD deficiency. Therefore it can be valued suspension the days prior to delivery in cases of kidney
pathology. This kidney pathology not influence the route of delivery.

Key words: kidney pathology, pregnancy, asymptomatic bacteriuria

Presenter name: V. Melero Jimenez

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Becker miotonia. Labor and delivery. Case report Becker

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Introduction

Becker myotonia is an autosomal recessive disorder. The prevalence is 1/50000. This disease is caused by a mutation of the gene CLCN1.

All striated muscle groups manifested by muscular rigidity, including the extrinsic eye muscles, facial and tongue.

There is an autosomal dominant variant. Stiffness Variation has episodes of transient weakness with movement and improves with repeated muscle contraction (phenomenon of "hot" or warming "). In this group of patients, it is recommended to avoid some depolarizing drugs that can trigger stiffness, such as epinephrine, colchizina, muscle relaxants, beta agonists and antagonists beta.

The genetic study should be offered in cases where the responsible mutation has been identified in the family. The route of delivery is not modified by the presence of this disease.

Materials and Method

Review of the literature related to the evaluation, clinical diagnosis and treatment of Becker myotonia during pregnancy.

Results

Pregnant woman 37 weeks. Monitoring at High Risk Pregnancy Unit at the Puerta del Mar Hospital by Becker myotonia. Treated with mexiletine.

Monitoring of pregnancy was performed jointly with specialists in neurology, because it presented slight deterioration of their disease during pregnancy requiring increasing doses.

Labor began spontaneously.

Vaginal delivery was uncomplicated. The newborn was a girl of 3450 grams. Apgar 9-10.

Conclusion

Becker myotonia usually does not interfere with the course of pregnancy, or vice versa, although up to 3-5% worse during pregnancy.

Caution should be exercised because certain medications can trigger a neuroleptic malignant syndrome. Regional anesthesia is preferable to general anesthesia. There is no contraindication to vaginal delivery

Key words: Becker myotonia, pregnancy, delivery.

Presenter name: V. Melero Jimenez

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Management of supra ventricular tachycardia (PSVT). Labor and delivery

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Introduction

Arrhythmias are the most common during pregnancy in women with and without structural heart disease. The mechanism of arrhythmogenesis is attributable to hemodynamic changes, hormonal autonomic changes. PSVT can occur for reentry in the atrioventricular node (AV node) or an accessory pathway, with the former being more common in women without underlying disease. Clinically usually presents with palpitations, syncope, dyspnea, chest pain. Generally well tolerated in women without structural heart disease.

Materials and Method

Review of the literature related to the evaluation, clinical diagnosis and treatment of mother supra ventricular tachycardia during labor and pregnancy.

Results

Pregnant 16 weeks prior to pregnancy supraventricular paroxysmal tachycardia.

The patient had good tolerance palpitations with vagal maneuvers (Valsalva, carotid massage) without rescue medication (metoprolol). At 39 weeks the patient had several episodes of palpitations with symptomatic involvement (dyspnea) therefore labor induction was decided.

Oxytocin induction began and vaginal delivery is achieved without complications in just six hours, newborn male 3520 grams with Apgar 9/10

Conclusion

PSVT should multidisciplinary control obstetrician and cardiologist.

If hemodynamic instability is convenient cardioversion.

While there is no hemodynamic instability use vagal maneuvers, adenosine or metoprolol and propranolol, investing up to 90% of PSVT.

The use of atenolol is not recommended.

Combining antiarrhythmic treatment with digoxin also be an option. In the most resistant cases, radiofrequency ablation of the slow pathway should be done before pregnancy. If malignant arrhythmias during pregnancy, ablation would be possible in selected cases. In general, anticoagulation therapy is not indicated for PSVT.

Control of intrapartum fetal heart rate and maternal often recommended. The use of epidural anesthesia is not contraindicated. Vaginal delivery is the best option for childbirth, instrumentation to reduce maternal effort, can help reduce intrapartum maternal tachycardia.

Key words: Supraventricular paroxismal tachycaridia, pregnancy, delivery

Presenter name: V. Melero Jimenez

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Morte Fetal, Um desafio Clínico : Realidade de um Hospital Distrital

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Introduction

The fetal mortality refers to the death of a fecundation product before expulsion or complete extraction of the mother body, regardless of the duration of pregnancy.The source of information used is the certificate of fetal death that is used in case of fetuses with 22 or more weeks. The perinatal mortality rate, is often used as an indicator of obstetric and neonatal health care and combines the fetal mortality rate (late deaths in utero with 28 or more weeks) and early neonatal. According to data from the Portuguese General Direction of Health, in 2013 there has been a rate of fetal death of 2.83/1,000 live births and perinatal mortality 3.5/1,000 live births, noting a slight decrease compared to previous years.

Etiologically, there are three main underlying causes, in particular the maternal (ex: diabetes mellitus not controlled, infection, hypertension, pre-eclampsia or eclampsia, hemoglobinopathies, inherited thrombophilia), fetal (ex:.congenital anomaly or genetics, infection by Parvovirus B19, Listeria, CMV or hidrópsia) and placenta anomalies (ex. abruptio placentae, vasa previa, umbilical cord pathologies, PROM). Prospective studies identify the placenta underlying 65% of cases, however, others say that at 25 to 60% the cause remains unknown. There are various risk factors pointed out, such as obesity, smoke or the advanced maternal age, however, is recognised to them a low predictive value.

The goal of this work is to report the cases of intrauterine fetal deaths that occurred at Hospital Center of Leiria during 2010 to 2014.

Materials and Method

We performed an observational, descriptive and cross-sectional study, of the fetal death cases that occurred in Hospital Center of Leiria, from 2010 to 2014. The information was obtained by consulting medical records. The statistical analysis was performed by using the SPSS * 20.

Results

There were 24 cases of intrauterine fetal deaths from 2010 to 2014, representing 0.2% of births in the institution (constant value over studied years). All pregnancies were unifetal. The mean age was 31 years, 45% had a medium risk on modified Goodwin scale, 79% were married, 20% unemployed and 28% with unskilled labor. In regard to risk factors we point four cases of chronic hypertension, two hereditary thrombophilia and two of heavy smokers(>15 cigarettes/day).

8.3 % had a pregnancy not supervised and 4.2 % a late beginning of monitoring. 20% of pregnant that started the follow-up at the first trimester had less than 6 doctor's appointment. 58% were nulliparous and 54% had gestational age greater than or equal to 35 weeks. 35% went to emergency service by sensation of painful contractility and 20% because of absence of active fetal movements with more than 24 hours of development.

66.7% expelled through the vagina, with episiotomy, 16.7% was necessary vacuum extraction and 16.7 % c-section. 29.2 % weighed between 2500 and 3000 g. After research 54.2% of cases were classified as group Ia at Wigglesworth's classification.

Conclusion

In view of the limited number of cases, it is only possible to say that a considerable number of women had an insufficient obstetric follow-up and that approximately 20% of the causes of intrauterine fetal deaths remained to be explained. The data presented are in accordance with the current literature. There is a general agreement on the need to investigate the underlying causes of fetal death, with the aim of preventing its occurrence, improving obstetric follow-up and consecutively decreasing perinatal mortality rate.

Key words: morte fetal, taxa de mortalidade fetal e perinatal
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Rising induction of labour rates and its effect on mode of delivery

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Introduction

The rates of induction of labour (IOL) are on the rise. Recent literature regarding the effect of induction of labour on mode of delivery especially regarding caesarean section has been conflicting.

In our hospital the IOL rates have increased over last 4 years. In view of the conflicting evidence this study was conducted to establish the effect of induction of labour on mode of delivery within our unit.

Materials and Method

In this retrospective observational study the annual rate of spontaneous vaginal deliveries, instrumental deliveries and caesarean sections over last 4 years from 2011 to 2014 were assessed. The IOL rate over this period was noted to have increased with significantly higher rates in 2013 and 2014. In view of this the data for IOL for 24 months period from January 2013 to December 2014 was further analysed.

1568 women had induction of labour over this time period. As the aim was an overall comparison rather than a subgroup analysis all induction of labour procedures for various indications, irrespective of gestational age and with all maternal demographic characteristics were included for analysis. The data from all these cases was studied and the mode of delivery following IOL was compared with the overall rate for each mode of delivery. Further analysis of the data was performed to evaluate the effect method of IOL on mode of delivery.

Results

Over the 4 years period from 2011 to 2014; 14765 women were delivered in Ipswich hospital. The rate of spontaneous vaginal delivery remained stable over the study period being 65.9% in 2011 & 66.5% in 2014. The instrumental delivery rate remained largely unchanged and was 13% in 2011, 12% in 2012, 11% in 2013 and 12% in 2014. The caesarean section rate showed a small but insignificant increase being 20.5% in 2011, 20.4% in 2012, 21.2% in 2013 and 21.4% in 2014.

The incidence of IOL had increased from 17.3% in 2011 & 16.9% in 2012 to 21.4% in 2013 and 22.4% in 2014. In the 24 month period from Jan 2013 to December 2014 a total of 1568 IOL were carried out.

Analysis of the mode of delivery in these 1568 cases revealed spontaneous vaginal delivery rate of 64%, Caesarean section rate of 19% and instrumental delivery rate of 17%. IOL did not lead to significant difference in the overall vaginal delivery or caesarean section rates. Instrumental delivery rates were much higher in the IOL group compared to overall rate (17% vs 12%).

Medical IOL with prostaglandin was the commonest method used in 71%. Following medical IOL the vaginal delivery, instrumental delivery and caesarean section rates were 67.5%, 15% and 15.5% respectively. Surgical IOL with amniotomy resulted in vaginal delivery rate of 61.5%, instrumental delivery rate of 18% and caesarean section rate of 20.5%. A combination of medical and surgical IOL technique resulted in vaginal delivery rate of 62%, instrumental delivery rate of 22% and caesarean section rate of 16%.

Medical IOL resulted in higher rates of vaginal delivery and lower rates of caesarean section compared to the surgical method of IOL.

Conclusion

Our data suggests that women undergoing induction of labour should be reassured regarding success rates of vaginal delivery following IOL and that IOL does not increase likelihood of caesarean section. They should be counselled regarding the possibility of instrumental delivery.

Key words: IOL, caesarean, vaginal, instrumental

Presenter name: R. Gada

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Variability in normal delivery care center by place of birth: Public or Private Hospital

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Introduction

From the 60s was in Spain a rapid expansion in the use of clinical practice to start, accelerate, regulate and monitor the delivery process routinely treating all women with the same degree of intervention without considering the risk of her pregnancy.

Over time the scientific evidence has shown that intervene in the physiological process of normal birth without medical indication increases the risk of complications for mother and newborn.

So many strategies have been developed to promote non-intervention in normal childbirth and encourage those clinical practices that should be promoted. All are contained in the Guide to Clinical Practice Guideline for Normal Birth Care.

Despite all this great variability in practices and care taking place in childbirth persists ownership of the hospital being a factor in this variability.

Materials and Method

Main objective:

Compare the process of care women receive hospital care in normal childbirth in Altahia, according to public or private healthcare model during the years 2012-2013

design:

observational, longitudinal, prospective cohort analytic study

The sample size is 280 pregnant

The sampling technique is not probabilistic consecutive

A sheet was developed to collect data and in the delivery room midwife at the end of childbirth variables collected on obstetric and perinatal practices.

Results

The type of delivery in public attendance was 74.8% of normal deliveries and cesarean 2.16% compared to 59.8% of normal deliveries and cesarean 17.7% in private assistance.

Statistically significant differences were found in the following obstetric and perinatal practices: fluid intake; alternative measures for pain relief; amniorrhexis; use of oxytocin; position in the expulsion; episiotomy; Kristeller maneuver; Skin to skin; start breastfeeding in the delivery room.

No statistically significant differences found at: application of enema and shaving; accompanied by a midwife; nasopharyngeal suctioning of the newborn.

Conclusion

Of the 13 practices analyzed in the study that recommended in clinical practice guidelines on the management of normal delivery, 100% were followed in the public hospital versus 23% in the private hospital.

Normal deliveries in the private hospital remain high intervention.

Key words: practice evidence based, childbirth, private hospitals,public hospitals

Presenter name: Neus Garriga Comas

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GESTATIONAL DIABETES MELLITUS AND LABOUR OUTCOME – OLD AND NEW CRITERIA

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Introduction

Since the consensus of diabetes and pregnancy in 2011, all Portuguese pregnant women performed a gestational diabetes mellitus (GDM) screening according to the criteria proposed by the International Association of Diabetes and Pregnancy Study Groups. However, it has always been a concern about the increased prevalence of GDM without any significant benefit in obstetric outcomes. The primary objective of this study was to determine if the introduction of the new diagnostic criteria of GDM improved the labour outcomes in our hospital

Materials and Method

Retrospective case-control study. Pregnant women with GDM who delivered between 2008 and 2013 in our hospital were divided into 2 groups according to the diagnostic criteria – old (OC – 507 women) or new (NC – 376 women). Twin pregnancies and stillbirth were excluded. The statistical analysis was performed with IBM SPSS statistics 20.0

Results

There was a similar prematurity rate in both groups, with a mean gestational age at delivery of 38.4 weeks in OC and 38.3 in NC (pNS). There was a small increase in the number of labour inductions on the NC group (41.3% vs. 37.4% in OC) but without statistical significance. The global cesarean section (CS) rate was 31.6% in OC and 38.0% in NC ($p<0.05$). If the elective CS were excluded, there was still an increase ($p<0.05$) in the rate of CS in the NC group (24.8% vs. 16.8% in OC). There was a decrease in the rate of CS due to labour dystocia in NC (35.1% vs. 55.7% in OC) ($p<0.05$). The rate of CS due to fetal distress was 27.1% in OC and 39.0% in NC (pNS). After induction of labour, the CS rate was 23.1% in OC and 30.5% in NC (pNS). When labour occurred spontaneously, the CS rate was 13.0% in OC and 20.9% in NC ($p<0.05$). While comparing the vaginal birth, the eutocic delivery rate was 60.2% in OC and 69.1% in NC ($p<0.05$). Among the NC there was a higher rate of women under insulin treatment (39.6% vs. 23.3% in OC) ($p<0.05$) however, there was no increase in the number of labour induction on those women (34.7% vs. 44.3% in those without insulin) (pNS). There was an APGAR index ≥ 7 by the first minute in 90.5% (OC) and 95.5% (NC) ($p<0.05$). By the fifth minute there was no significant difference between the APGAR index (99.6% in OC vs. 99.7% in NC). The mean birth weight was 3207.2g in OC and 3110.7g in NC ($p<0.05$). The rate of newborns large for gestational age (LGA) was 11.8% in OC and 8.5% in NC (pNS) and the rate of delivery complications related with macrosomia was 0.8% in OC and 0.5% in NC (pNS)

Conclusion

According to this study there was an increase in the CS rate in the NC group, especially due to non-elective CS. Since most of the parameters of this population remained stable along the years, this may represent a bias due to the abnormal global increase in CS in our hospital in 2012 and 2013. Overall, it is important to increase our population in order to study the labour outcomes of the new GDM criteria

Key words: Gestational Diabetes Mellitus, oral glucose tolerance test, pregnancy outcomes

Presenter name: Filipa Nunes

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IS IT POSSIBLE TO DECREASE THE CESAREAN RATE FOR BREECH PRESENTATION IN MADEIRA ISLAND? A FIVE-YEAR RETROSPECTIVE STUDY AND THE EXPERIENCE OF THE GYNECOLOGY/OBSTETRICS' DEPARTMENT

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Introduction

Breech presentation at 37 weeks of gestation and beyond complicates approximately 3.8% of pregnancies, and more than 85% of pregnant women with a persistent breech presentation delivered by cesarean.

In order to minimize the risks associated with either elective cesarean or breech vaginal delivery, the American College of Obstetricians and Gynecologists recommend the application of external cephalic version (ECV) to decrease breech presentations in singleton gestations.

The purpose of this study is to determine the cesarean rate for breech presentation in Madeira Island (Nélio Mendonça's Hospital) and the probability of reducing this rate in the opinion of the medical department.

Materials and Method

A retrospective study was performed using the department's database from 1 January 2010 to 31 December 2014. A questionnaire was prepared about breech delivery and external cephalic version and was given to all doctors of Gynecology/Obstetrics' department of Nélio Mendonça's Hospital.

Results

In this period, we identified 10041 deliveries. Two thousand seven hundred fifty-five were cesarean deliveries (total cesarean rate – 27.4%). Of the 10041 deliveries, 441 (4.39% of all deliveries) were breech presentations in singleton gestations: 435 (98.7%) were delivered by cesarean section and only 6 (1.3%) of them were vaginal deliveries. All of breech vaginal deliveries were on second stage of labor when they were admitted. Of the 435 delivered by cesarean section, 74 (17%) were in spontaneous labor and 361 (83%) were admitted for elective cesarean delivery. In this department external cephalic version is not performed. Relatively to the questionnaire, of the 27 doctors of the department, 21 specialists and 6 residents, 48% of doctors have experience in vaginal breech delivery but only 8% have experience in external cephalic version. Three doctors made over 100 breech vaginal deliveries, 7 made more than 20 and 9 made less than 5 breech vaginal deliveries. Three doctors never made any vaginal breech delivery. Most doctors always make cesarean section if the fetus is in breech presentation; nevertheless are interested in training in vaginal breech delivery (72%) and in external cephalic version (68%). The majority of doctors do not believe to be relevant decrease the cesarean rate for breech presentation (68%).

Conclusion

The cesarean rate for breech presentation remained stable over this period. We concluded the cesarean rate of Nélio Mendonça's hospital will not be reduced for this reason but perhaps we could reduce this rate for other reasons like steady state of labor or for fetal distress. Forty percent of doctors made greater than 20 vaginal breech deliveries before the publication of the randomized comparative study of vaginal breech delivery and cesarean section at term (Hannah ME et al., 2000). Although doctors are interested in training on external cephalic version and vaginal breech delivery, they believe this do not have impact in the total cesarean rate.

Key words: vaginal breech delivery, cesarean for breech presentation

Presenter name: Marlene Andrade

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Reduction in cesarean section rate – Impact on maternal and neonatal morbidity

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Introduction

Introduction

The cesarean section rate has been rising in developed countries, being especially high in Portugal. In recent years a national effort has been in progress to attempt to reduce this rate, as cesarean delivery is associated with higher maternal and fetal morbidity and higher economic cost. In tandem with this effort, in the second semester of 2013 our department introduced several strategies to reduce cesarean section rate.

Objective

Evaluate the success of the strategies implemented to reduce the cesarean section rate and its impact on maternal and neonatal morbidity.

Materials and Method

Methods

Retrospective descriptive study, comparing obstetric results and major diagnoses associated with maternal and neonatal morbidity from deliveries occurred in our hospital on the first semester of 2013, to those occurred in the first semester of 2014.

Results

Results

There was a total of 817 deliveries in the first semester of 2013 and 752 deliveries in the same period of 2014. The global rate of cesarean section rate significantly decreased (32.3% vs. 23.7%, p=0.000). In particular, this rate significantly decreased in mothers 20-39 years old (32.8% vs. 26,6%, p=0,000), primiparous (35.2% vs. 24.8%, p=0.001) and multiparous without previous cesarean section (17.0% vs. 10.9%, p=0.042). No statistical difference was observed in maternal morbidity, namely in II and III degree lacerations, postpartum hemorrhage, vaginal or perineal hematoma or infection of the operatory wound. There was also no statistical difference in newborn morbidity, namely Apgar score, admission to NICU, skeletal birth lesions or fractures, brachial plexus lesions or cephalohematoma.

Conclusion

Conclusion

The strategies implemented in our department to reduce cesarean section rate were extremely effective, resulting in a statistically significant decrease of 8,5%. There was no increase in maternal or neonatal morbidity in the population evaluated in this retrospective study.

Key words: Cesarean section, cesarean section rate

Presenter name: M. Boia

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THE HAEMOSTATIC SYSTEM STATE AT PREMATURE ABRUPTION OF NORMALLY PLACENTAL OF PLACENTA

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Introduction

The special clinical problem in modern obstetrics is represented by acute placental insufficiency which develops as a result of premature placental abruption. In spite of the fact that this complication of pregnancy and labor occurs about 0,5-1,2% cases, it is always considered as a condition vital threats as in 30% of cases is the reason of the massive bleedings leading to maternal death rate.

Materials and Method

To studying of coagulation system condition at premature placental abruption against thrombophilia the haemostasis system of 70 (the main group) pregnant women with complicated obstetrical anamnesis and premature placental abruption were undergone to the investigation. The age of the surveyed women varies within 18-40 years, and average age was 28,2±0,7 year. The average gestational age on delivery of patients from the main group was equal to 34,2±0,5 weeks. The control group was consisted of 20 women with not complicated current of pregnancy and «physiological hypercoagulation» in similar terms of gestation, which delivered by vaginally. For research of haemostasis system condition there have been used the standardized tests characterizing all phases of coagulation: activated partial thromboplastin time (APTT), prothrombin time (PT), prothrombin index (PTI), plasma fibrinogen and soluble fibrin-monomer complexes (SFMC) concentration, amount of platelets.

Results

Amount of platelets in peripheral blood from main group patients were almost analogically with women of control group (211,3±2,1*109/l and 218,2±4,3*109/l; p>0,05). Standard research of coagulation system of the blood, which performed by traditional methods, has not revealed any deviations from its normal references at women with PANLP. APTT, characterising an internal way of coagulation, practically did not differ from that at women of control group (38,2±0,9 and 37,8±1,2 sec accordingly; p>0,05). PT, characterizing an external way of coagulation, also on average values corresponded similar in control group (15,6±0,4 and 15,6±0,6 sec accordingly; 0,05). Fibrinogen concentration at main group patients had no authentic distinctions with control group (3,7±0,1 and 4,0±0,2 g/l accordingly, p<0,05). However at all women with PANLP increasing of SFMC level, being markers of intravascular curling which are in plasma in the dissolved condition was marked, reflect degree of intensity of intravascular curling of blood (thrombinemia) and expressivenesses of fibrin formation processes. Here is SFMC level exceeded at patients from control group on 1,4 times (6,4±0,3 and 4,7±0,3 mg%, accordingly; p<0,001) also correlated with degree of increase of fibrinogen concentration average positive communication (r =+0,35). At studying of intravascular conditions of hemostasis coagulation methods at pregnant women with PANLP had been revealed following tendencies at hemostasis system. Thus, the haemostasis system of patients with PPA was characterized by pathological activation of intravascular blood coagulation against normal amount of platelets which by the moment of delivery at 22,9% of lying-in women was realized by the chronic form of the DIC-syndrome with signs of chronometric hypercoagulation and increase of SFMC concentration.

Conclusion

Research of hemostasis system at patients with PANLP have essential changes characterized with hypercoagulation in plasma link of hemostasis, coagulopathy consumption, hypocoagulation against occurrence in plasma of blood of markers of activation of intravascular curling of blood (SFMC). At pregnant women with PANLP with congenital defect of hemostasis system SFMC level surpassed similar in group of healthy pregnant women more than in 1,8 times.

Key words: abruption of placentae, haemostasis system

Presenter name: Gulnora Hodjimuratova

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Who decides the position for birth? A follow-up study of a randomized controlled trial

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Introduction

Researchers report physical benefits for women and their infants, when being in an upright position of their choice at birth. Available care options in the second stage of labour influence women's conception of intrapartum care, indicating that the choice of birthing positions may be determined more by midwives' advice than by women's preferences. The aims were to investigate factors associated with decision-making for position at birth and with adherence to allocated birth position in a previously conducted randomised controlled trial.

Materials and Method

A follow-up questionnaire posted to participants in an RCT, initially carried out to compare levels of instrumental birth in nulliparous women who gave birth on a birth seat or in any other position. Of those allocated to the birth seat group, 289 answered the follow-up questionnaire and were included. Among these women 177 adhered with allocation and 112 did not adhere. Questions were analyzed with descriptive statistics. Adjusted risk ratios with a 95 % CI were calculated for comparison of variables.

Results

Despite being randomised, women who gave birth on the seat were statistically significantly more likely to report that they participated in decision-making regarding birth position and that they took the opportunity to choose their preferred birth position. They also reported a shorter second stage of labour and less birth complications. Birth aroused various emotions and women who gave birth on the birth seat reported statistically significantly more often than non-adherers that they felt powerful, protected and self-confident.

Conclusion

Birth-attendants should be conscious of the potential impact birth positions have on women's birth experiences and on obstetric outcomes. An upright birth position, when chosen by the woman, enhances a feeling of empowerment, and leads to greater childbirth satisfaction. Midwives should encourage women´s autonomy by giving unbiased information about birth positions. Women's experience of and preferences for birth positions are consistent with current evidence for best practice

Key words: Birth position, decision-making, second stage of labour, RCT, on-line questionnaire

Presenter name: Li Thies-Lagergren

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BACK TO OLD SCHOOL: LABOR INDUCTION WITH FOLEY BALLOON

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Introduction

Mechanical methods were the first methods developed to ripen the cervix and induce labor. Over the last decades they have been replaced by pharmacological methods which in turn increase the risk of uterine hyperstimulation with fetal heart rate changes and thus, increasing the risk of cesarean section. Potential advantages of mechanical methods, compared with pharmacological methods, may include simplicity of use, lower cost and reduction of the side effects referred. In a moment where it is so important to define strategies to reduce cesarean section rate, we decided to reuse this alternative method of induction and we intend to describe our results.

Materials and Method

We performed a retrospective study of all cases (n=13) of labor induction with Foley catheter balloon in our institution between May 1st ,2014 and January 31st ,2015 . Our protocol includes the insertion of a 30 mL catheter into the cervix until internal os, by using a speculum. The Foley's balloon is then inflated to a total volume of 30 ml. Following inflation, the catheter is pulled out to the point where the balloon covered the internal cervical os, the speculum is removed and the catheter is taped to the patient's inner thigh with light tension.

We enrolled women with a term or late-preterm pregnancy in cephalic presentation, intact membranes, an unfavorable cervix (Bishop Score ≤6) and an indication for labor induction. Patient's clinical records were reviewed and the main outcomes measured included time from device insertion to delivery, rate of vaginal delivery and occurrence of adverse events.

Results

Patient's mean age was 34 ± 4.3 years old and 46.15% were nulliparous. From the group with previous delivery (n=7), 53.85% (n=4) had previous cesarean section.

The mean gestational age at the time of induction was 39.3 weeks (min-max 36-41 weeks, respectively). Regarding the indications for induction, 30.76% (n= 4) were for gestational age (>41 weeks) and 69.23% (n= 9) for fetal indication (intra-uterine growth restriction (n=3), oligohydramnios (n=5) and Rhesus isoimmunization(n=1)).

In our study, all women achieved active labor and oxytocin was used in all cases after balloon expulsion. The mean time for balloon expulsion was 13 hours (min- 6; max- 24 hours) and for induction-to-delivery was 39 hours (min-8; max 108 hours). The rate of vaginal delivery was 76.92% and of cesarean section was 23.07%. The indications for cesarean section were fetal distress during active labor (n=2) and dystocia (n=1).

Two-thirds (66.6%) of the women who had a previous cesarean section delivered vaginaly and only one had another cesarean section (for fetal distress). No maternal or neonatal morbidity were recorded in our sample.

Conclusion

Our data suggest that mechanical induction of labor with Foley catheter balloon is safe and effective and should be considered for use in clinical practice. Despite our sample is small, we think that our results support the use of this method for labor induction, particularly in high-risk groups such as women with previous cesarean section or with growth-restricted fetus and oligohydramnios.

Key words: labor induction, Foley catheter balloon

Presenter name: Ana Teresa Marujo

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Induction of labor through vaginal prostaglandins for two consecutive days

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Introduction

Labor induction is performed in approximately 20% of births and cervical ripeness is one of the most important factors in predicting success. To get this in recent decades has been used prostaglandin E2 (PGE2), with good results.

The purpose was to compare the efficacy of a protocol for labor induction with two doses of vaginal prostaglandins with the results published in the literature with a single dose protocol.

Materials and Method

It was performed a retrospective study with 204 women who required induction of labor between 01/01/2012 and 15/12/2014. Inclusion criteria: induction by gestational age> 290 days, Bishop score ≤ 6, intact membranes. Induction was performed by dinoprostone vaginal insert repeating a second insertion after 24 hours if labor hadn't started yet.

Included variables: parity, Apgar score, umbilical cord pH, birthweight, time to delivery, hyperdynamia with and without fetal involvement, need to remove medication and tocolysis.

Results

When two-dose protocol was applied active labor began in 85.3% of cases with the first dose, 14.7% required a second dose and it was necessary to continue the induction with oxytocin at 5.3%. Vaginal delivery occurred in 86.2% of cases, with a caesarean section rate of 13.7%, of which the indication for induction failure assumed 1%. Hyperstimulation with abnormal fetal heart rate was presented in 5.4% of cases, which required removing the device and administration of tocolysis.

Conclusion

These results are similar to those published by applying a single dose, although with the single dose protocol occurred a lower frequency of adverse effects (tachysystole with fetal involvement and need for tocolysis ocurred in 1.2% of cases).

Although a vaginal insertion device PGE has shown safe because of its ease of application and the possibility of removing, applying a second dose appears to show no advantage over the application of a single dose.

Key words: Labor induction, vaginal prostaglandins, cervical ripenning.

Presenter name: Laura Revelles Paniza

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CESAREAN SECTION AND FEMUR FRACTURE : A RARE BUT POSSIBLE COMPLICATION FOR BREECH PRESENTATION

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Introduction

Birth injuries are uncommon, occurring in less than 1% of live births. Although cesarean delivery can reduce this complication, long bones fractures can still occur. For breech presentation long-bone fractures were more frequently associated with cesarean breech deliveries compared with vaginal deliveries, as reported in the literature.

We present a case of left femur fracture that occurred in the course of cesarean section performed for breech presentation.

Materials and Method

Review of patient´s clinical records

Results

The case concerns a 29-year-old, primiparous patient who underwent a cesarean section at 37 weeks of gestation for intra-uterine growth restriction and breech presentation.

Combined spinal and epidural anesthesia was performed with adequate analgesia and muscle relaxation. An incision was made in the lower segment as usual, and the infant's buttocks and iliac crest lay beneath the incision site. The infant was in a frank breech presentation. Although traction was a little dificult, the buttocks and lower extremities were pulled out without employing further maneuvers.

Just at the moment of delivering the buttocks and the thighs from the incision, surgeons heard a "crack" and reported this to the neonatology team. A male infant weighing 2,540 g cried spontaneously and Apgar scores were 9 and 10 at 1 and 5 minutes respectively. Routine examination soon after delivery revealed no abnormalities except Ortolani test positive. The next day, the left thigh showed moderate swelling with decreased mobility compared to the right and so a radiographic examination was perform. The examination revealed a left femoral shaft fracture with the proximal segment displaced anteriorly; The bone structure and mineralization were visibly normal; there was no other observed fracture/bone deformities or osteoarticular anomalies.

The newborn was treated with Pavlik harness. On the 30th day after birth, the radiogram control showed the formation of a callus at the level of the margins of fracture. At the 90th day after birth, the fracture was found to be almost fully welded and the child was able to move his left leg actively in all planes of space.

Conclusion

Although abdominal breech delivery reduces the risk of birth trauma, we must be aware that femur fracture can occur regardless of the mode of delivery.

The occurrence of characteristic sound (crack) may be regarded as an important sign to put on suspicion of femur fracture during extraction and so, it should be recorded and informed to neonatologists. When diagnosed early and treated properly, the prognosis for these fractures is good without sequels and one can expect a satisfactory clinical outcome for the child.

Key words: delivery, femur fracture

Presenter name: Ana Teresa Marujo

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SPONTANEOUS PUSHING OR VALSALVA PUSHING. PRACTICE WITH EVIDENCE.

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Introduction

Pushing is defined as the involuntary reflex which causes a compression of the fetal head on the pelvic floor. There are two kinds of pushing: spontaneous ,or free, in which the woman pushes when she feels the urge to do so, giving each contraction between 3 and 5 shorts breaths using exhale pushing, no more than 5-6 seconds, with open glottis; an directed pushing, or the Valsalva maneuver, in which the woman is prompted to take air, keep the mouth shut and thrust 10-30 seconds (with closed glottis), exhale and pushing again - this is repeated 3-4 times with each contraction, increasing the pressure on the pelvic floor. Our objective is to present the current available evidence on the benefits of pushing in the delivery versus expectant management.

Materials and Method

Search of current evidence in databases such as COCHRANE, PUBMED OR UPTODATE with keywords “childbirth” OR “second stage of labour” AND “pushing”.

Results

The results indicate that the completion of directed pushing with the Valsalva maneuver reduces the duration of the second stage of labor, compared to spontaneous pushing. Furthermore, with the routine practice of directed pushing there can be detrimental effects on the integrity of the pelvic floor, which is linked to the appearance urinary and fecal incontinence at three months of delivery, and which may persist for years. However, no detrimental effect has been observed when women are allowed to push freely. Bladder capacity and the initial urge to urinate during testing were both significantly decreasedNo other significant differences regarding bladder function were found.

There were no significant differences following spontaneous or Valsalva pushing in Apgar scores <7 after 5 minutes.

A meta-analysis of pooled data from 12 randomized trials of immediate versus delayed pushing found that delayed pushing resulted in a small but statistical increase in a woman's chance of having a spontaneous vaginal birth (61.5 versus 56.9 percent), as well as prolongation of the second stage (mean difference 57 minutes to 72 minutes) and less time pushing (mean difference -22 minutes to -13 minutes), but did not lead to a statistical reduction in the rate of cesarean or instrumental delivery.

The practice of early pushing showed ahigh incidence of instrumental deliveries and cesareans. In addition, lower rates of fetal O2 saturation were found, along with increased in the occurrence of variable decelerations in the registered cardiotocographic. Conversely, late pushing was associated with an increase in spontaneous vaginal deliveries. It should be noted that in the practice of late pushing there was an increase in the length of expulsion, which is attributable to an increase in the passive phase of expulsion and not to the active phase, which was reduced

Conclusion

Given the available data, the decision to delay pushing can be based on patient-specific factors, such as the need to expedite delivery. The evidence from our review does not support the routine use of Valsalva pushing in the second stage of labour. The Valsalva pushing method has a negative effect on urodynamic factors according to one study. The duration of the second stage of labour is shorter with Valsalva pushing but the clinical significance of this finding is uncertain.

Key words: "childbirth” OR “second stage of labour” AND “pushing”.

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CURRENT EVIDENCE OF PERINATAL NEUROPROTECTION.

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Introduction

Preterm birth (delivery at <37 weeks' gestation) is a leading cause of neonatal morbidity and mortality, and despite substantial efforts its incidence has little changed. The neurologic consequences of extreme prematurity range from mild behavioural and cognitive defects to severe disability. Research on perinatal neuroprotection typically focuses on the incidence of cerebral palsy (CP). CP is defined as "a group of permanent disorders of the development of movement and posture, causing activity limitation, that are attributed to non-progressive disturbances that occurred in the developing fetal or infant brain…often accompanied by disturbances of sensation, perception, cognition, communication and behavior. Perinatal neuroprotection aims to reduce this outcome.

This review will cover the neurologic sequelae related to prematurity, current methods to prevent brain injury with a focus on the rationale for the use of magnesium sulfate, and emerging treatments for neuroprotection.

Materials and Method

Search of current evidence in databases such as COCHRANE, PUBMED OR UPTODATE with keywords "Preterm Birth" AND "Neuroprotection" OR "Cerebral Palsy".

Results

In a recently published Cochrane Review including the same five trials, Doyle and colleagues concluded that although there was no significant effect of magnesium sulfate on pediatric mortality, there were significant reductions in neurologic injury. They concluded that the number of women needed to be treated with magnesium sulfate to prevent one case of CP was 63. Magnesium sulfate must be used with caution and the use of protocols for administration is recommended. Prolonged use (>48 hours) is contraindicated due to the risk of bone abnormalities and calcium, phosphorous, and magnesium derangements in mothers and infants. Although term infants are also at risk for CP, and there is a potential that magnesium sulfate is neuroprotective for high-risk term infants, no published evidence supports the use of magnesium sulfate to prevent CP among infants born at term.

Another resource is the therapeutic hypothermia. A recent systematic review of 11 RCTs including 1,500 neonates (≥36 weeks EGA) showed therapeutic hypothermia significantly reduced mortality or major neurodevelopmental disability up to 18 months of age with an RR of 0.75. In light of these studies, cooling is now recommended within 6 hours of birth for term or near-term neonates with symptoms of moderate to severe hypoxic-ischemic encephalopathy (HIE) Therapeutic hypothermia requires considerable resources that are typically only available at tertiary care centers

Other strategies to prevent perinatal brain injury like a Delayed clamping of the umbilical cord (DCC): posited mechanisms for decreased rates of IVH associated with DCC include reduced risk of hypoperfusion and improved oxygen delivery to the brain. Additionally, avoidance of packed red blood cell transfusion may reduce the risk of a reperfusion event. Further, DCC ensures that adequate clotting factors are delivered to the infant. Finally, umbilical cord stem cells appear to be neuroprotective and have reduced infarct volume of hypoxic ischemic strokes in animal models. Based on this body of literature, some associations now recommends a delay (>30 seconds) for infants delivered less than 32 weeks EGA with a potential 50% reduction in rates of IVH

Conclusion

The strategies described here clearly have the potential to reduce the incidence and long-term consequences of perinatal brain injury. However, there are still high rates of morbidity and mortality associated with perinatal brain injury. Prediction and prevention of preterm birth are critical steps in reducing this outcome. Additionally, clinical tools to reliably predict term fetuses at risk for HIE and strategies to ameliorate that risk before brain injury occurs are imperative. Finally, a better understanding of the pathophysiologic mechanisms of brain injury due to various perinatal insults is necessary for development of tools to prevent the neural consequences of unavoidable injuries

Key words: "Preterm Birth" AND "Neuroprotection" OR "Cerebral Palsy".

Presenter name: ESTER ORTEGA PEREZ

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DIRECT ECG/CTG VS. TRADITIONAL CTG: COST-EFFECTIVENESS ANALYSIS

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Introduction

Fetal hypoxia is one of the major complications during the labor. Combination of CTG with direct fetal ECG can reduce the risk of operative delivery and neonatal metabolic acidosis. The objective of the study was the cost-effectiveness analysis of direct ECG/CTG vs. CTG.

Materials and Method

480 patients with a singleton pregnancy at term were randomized in the two groups by the fetal monitoring method during the labor: CTG with direct fetal ECG (n=215) and traditional CTG (n=265). The direct ECG test included the calculation of the T/QRS ratio and the registration of the ST-events by STAN. The FHR pattern was classified due to the FIGO Guidelines. We built the decision tree and conducted cost-effectiveness analysis of direct ECG/CTG vs. CTG with TreeAge Pro software. Analysis included the direct costs and few assumptions.

Results

By the CTG data, the patients of both groups were divided into subgroups with normal, suspicious and pathological CTG scan. The rate of spontaneous labor was higher in ECG/CTG group (87.0%), compared to CTG group (76.2%) ($p<0.05$). The risk of C-section and vacuum-extraction was higher in CTG group compared to CTG/ECG group (10.2% vs. 18.9%, and 2.8% vs. 4.5%). The risk of neonatal metabolic acidosis was lower in ECG/CTG group (6.5% vs. 17.1%). The sensitivity and specificity of the direct ECG/CTG was high and composed 97%/62% in women with suspicious CTG and 88%/70% in women with pathological CTG. The group of direct ECG/CTG has shown the reduced by 25% cost compared to CTG group. The ICER of ECG/CTG vs. CTG composed $3,500.

Conclusion

The direct ECG/CTG method of intrapartum fetal monitoring can reduce the risk of neonatal metabolic acidosis and operative delivery due to its high sensitivity and specificity. Compared to CTG alone, ST analysis is cost effective in high-risk term deliveries.

Key words: fetal intrapartum surveillance, cardiotocogram,electrocardiogram, ST analyses

Presenter name: O. Baev.

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Predictors of outcomes in vacuum-assisted vaginal delivery: the importance of fetal head position identification

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Introduction

Adverse outcomes of vacuum delivery (VD) are often caused by the user's unfamiliarity with the basic rules of the procedure. In Our centres periodic trainings according to Vacca's method with Kiwi OmniCup®, identification of the fetal head position and the flexion point are performed in order to acquire technical skills. We analyzed in a cohort of successful or attempted vacuum-assisted vaginal deliveries which variables affect adverse neonatal, maternal and procedure outcomes.

Materials and Method

We retrospectively analyzed a cohort of prospectively collected cases of successful or attempted vacuum-assisted vaginal deliveries for the years 2012 and 2013 in two hospitals with a tradition of teaching of obstetric practice. Kiwi OmniCup® was used in all cases. All the operators were asked to record fetal head position and station at vacuum application, number of pulls and cup detachments. We analyzed obstetric and perinatal variables, indication for application (non reassuring fetal hearth rate, failure to progress, maternal exhaustion), and technical aspects of the procedure. The main outcomes were adverse neonatal outcome (umbilical artery pH≤7.10, or Apgar at 5min≤7, or shoulder dystocia), adverse maternal outcome (postpartum blood loss ≥500ml and third or fourth degree perineal tears), and failure of the vacuum extraction. Statistical analysis included chi-square test, One-Way Anova and logistic regression with $p<0.05$ considered significant.

Results

During the study period there were 9,661 deliveries with a VD rate of 4.8% (449).
10 cesarean sections were performed for failed VD (10/459, 2.2%).
Fetal head position at vacuum application was identified and recorded in 309/459 (67.3%), fetal head station in 420/459 (91.5%) cases. Among adverse neonatal outcomes, pH≤7.10 was significantly associated with induction of labor ($p=0.01$), indication for abnormal fetal heart rate ($p=0.001$) and absence of knowledge or registration of fetal head position at vacuum application ($p=0.04$). Head station at application, failed vacuum extraction, and experience of the operator were not predictors of any adverse neonatal outcome. The significant association between knowledge of fetal head position and umbilical artery pH persisted at multivariate analysis after correcting for VD indication (OR=0.4, 95% CI 0.1-0.8).
Among adverse maternal outcomes, postpartum blood loss ≥500ml and/or third or fourth degree perineal tears were significantly associated with induction of labor ($p=0.04$), length of second stage ($p=0.00$), birth weight ($p=0.00$), shoulder dystocia ($p=0.04$), fundal pressure during vacuum ($p=0.05$). At multivariate analysis only induction, length of second stage, and birth weight showed an independent effect on these outcomes.
Failure of vacuum extraction was correlated with occiput posterior position at vacuum application ($p=0.00$) and epidural analgesia ($p=0.02$). At multivariate analysis only occiput posterior remained significantly associated (OR=15, 95% CI 2.7-87.5).

Conclusion

To know the fetal head position at vacuum application is related to better umbilical artery pH independently from the indication for the vacuum application, whereas fetal head malposition (occiput posterior) is the strongest predictor of vacuum failure. Maternal outcomes are more related to labor and fetal characteristics.
Our results underline the role of training programs with identification of the flexion point for successful and safe VD.

Key words: vacuum delivery, flexion point, training
Presenter name: Anna Locatelli

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Internal Cardiotocography Protocol in Low and Medium Risk Pregnancies

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Introduction

To evaluate the labour progress and the fetal distress, we can use external cardiotocographic control methods (noninvasive), or on the other hand, internal methods. The last ones are more accurately, but have higher costs and also potential risks for the mother and the child. A proposed objective was to perform a specific action protocol to use the internal cardiotocographic in a hospital which take care of low and medium risk pregnant.

Materials and Method

A thorough review about the last 5 years published literature has been realized in the PUBMED database. Later, a consensus group, composed by midwifes and doctors, met in order to elaborate a protocol adjusted to our center and to the population that we attend.

Results

Until now, the evaluated studies don't support enough evidence to recommend the use of a routinely internal cardiotocographic method in low and medium risk pregnancies. Although uncommon, there are some complications to increase the maternal and child morbidity.

We developed a protocol agreed with the following sections: Objective, backgrounds, indications, contraindications, patient preparation, internal dynamical catheter insertion and fetal monitoring, catheter registering, cathetering removing and all the possible complications.

The instructions to put the internal dynamical catheter in low and medium risk prengnacies are those situations where exist difficulties in the assessment of uterine dynamics: Obesity, uterine malformation or uterine myoma and the suspicious that non-coordination of the uterine dynamics or other contractile dysfunction. And the situations where there is a lack of progress of labour with an uterine rupture risk: Women in labour time progression greater than 8 hours with intravenous oxytocin stimulation and women with a cervical progression absent or lower than 2 centimeters in 4 hours,with intravenous oxytocin stimulation during at least 2 hours.

The instructions to use the fetal electrode are restricted to: The exhaustive cardiographic fetal intrapartum control, in front of uncommon patterns in fetal reactivity, and the difficulties in the continuous fetal cardiographic register with intravenous oxytocin stimulation.

Conclusion

The use of internal cardiotocographic is not recommended for a routine of intrapartum care in low or medium risk pregnancies, but it can be useful for specific situations. The protocols based on evidence allow us to optimize resources and decrease risks.

Key words: fetal monitoring,internal tocodynanometry, action protocol

Presenter name: Angelica Hidalgo

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Vacuum assisted vaginal delivery: factors to improve technical challenges, a multicenter observational study

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Introduction

Cup dislodgement and failed extraction are common challenges in vacuum assisted delivery (VAD). The objective of the study was to determine clinical and technical factors involved in practice improvement.

Materials and Method

We retrospectively analyzed a cohort of prospectively collected VAD from January 2012 to December 2013 in two hospitals with a tradition of teaching of obstetric practice (according to Vacca's method). KiwOmniCup® was used in all cases. Factors possibly related to cup dislodgment (CD) and/or failure of the attempt (FA) were analyzed, including operator experience, maternal BMI>30, labor induction, epidural analgesia, fetal head station, fetal head position, and additional obstetric manoeuvre during vacuum traction (e.g. Kristeller manoeuvre). Fisher exact test, Chi square tests, and multivariable logistic regression analysis were used.

Results

During the study period there were 9,661 deliveries. The overall cesarean section rate was 18.3%(1776), and VAD rate was 4.8% (449). Ten cesarean sections were performed for failed vacuum (10/457, 2.2%). The rate of epidural analgesia was 51.6% (236). Fetal head station and fetal head position at vacuum application were identified and recorded respectively in 309/459 (67.3%) and in 420/459 (91.5%) cases. Operator experience and maternal BMI were not associated to CD and FA. Epidural analgesia was significantly associated both to CD ($p<0.04$) and FA ($p<0.02$). Fetal head station ($p<0.01$) was significantly related to CD; instead fetal head malposition (occiput posterior) was significantly related to FA ($p<0.001$). The use of additional manoeuvre was associated to CD ($p<0.001$). Multivariate analysis confirmed an independent association between CD and additional manoeuvre (OR=17.4; 95%CI 2.3-10.0; $p<0.001$) and an independent association between FA and fetal head malposition (occiput posterior) (OR=7.9; 95%CI 2.3-117; $p< 0.05$).

Conclusion

Fetal head malposition or not identified position can cause a technical defeat during vacuum delivery leading to the failure of the attempt. The use of additional manoeuvre does not improve the result and indeed can cause cup dislodgement too.

Key words: vacuum delivery, failure, fetal position
Presenter name: Armando Pintucci

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NATURAL METHODS FOR PAIN RELIEF IN LABOUR

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Introduction

There is a wide range of pain relief measures available to women in labour.
We examined the nonpharmacologic pain-relief techniques laboring women use most frequently.
The objectives of our study were:

- To determine the scientific evidence on effective natural methods of intrapartum pain relief
- To inform, educate and promote these alternatives
- To identify the benefits of natural methods of pain relief in labour

Materials and Method

A research of the available scientific evidence on pharmacological methods to reduce the pain in labour throughout major databases was performed, as well as various internet resources and clinical practice guidelines.
English and Spanish were the languages chosen to hold the review.
Articles were included in the review from 2004 to 2014

Results

The results according to scientific evidence were:

• Support: accompaniment, communication and counselling.
Reduces anxiety and fear
-higher advantages if support comes from the health professional

• Relaxation:
Decreases levels of catecholamines such as adrenaline and reduces interference with the secretion of oxytocin.

• Movement:
-In vertical positions pain sensation decreases and epidural analgesia is scarcely needed. The first stage of labour is shortened and fetal heart rate remains practically unaltered.

- Postural changes and pelvic asymmetries favour the modification of the amplitude of the pelvic openings, and therefore, fetal descent.
- Labour in movement has fewer complications than being static.

• Fluid intake:
-The intake of clear fluids during labour provides comfort to women and there is no justification to its restriction.

Lumbar injection of distilled water:
- Produces back pain relief in labour (a reduction up to 60% in pain scale), an immediate effect which lasts up to 2 hours, without any side effects.

• Hydrotherapy:
-Hot water immersion during the first stage of labour reduces the use of epidural analgesia and maternal pain sensation.
-Causes no adverse effects on the duration of labour,nor the rate of instrumental delivery or caesarean. There's no decrease in the rates of Apgar scores (over 7)at 5 minutes, nor admission to neonatal units nor neonatal infection rates.

• Nitrous oxide:
-Provides more welfare in the first stage of labour and a positive attitude of women towards the method.

Other methods:
-There's no evidence to prove their effectiveness or studies are limited. But they can be offered because they are not harmful, as long as women want them and are satisfied.
Among them are: TENS, acupuncture, acupressure, reflexology, hypnosis, relaxation, music therapy, multisensory rooms.

Conclusion

The proven benefits alternative methods provide need the adaptation and evolution of our practice to new demands.

More research on new methods of natural pain relief to demonstrate its effectiveness and applicability in our environment are needed.

Key words: intrapartum pain, natural methods,

Presenter name: Ana Isabel Fernandez Cuesta

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Assessment of fetal lung maturity in pregnancy complicated by preeclampsia and chronic placental insufficiency with intrauterine growth restriction

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Introduction

Due to the controversial results of recent scientific papers about the impact of gestational hypertensive disorders on fetal lung maturity, the underlying objective of this clinical study was to examine how affect, separately and in combination, severe hypertensive disorders and chronic placental insufficiency with intrauterine growth restriction (IUGR) on fetal lung maturity and respiratory function of infants.

Materials and Method

The prospective nine-year study (2002-2010) was conducted on singletons and twin pregnancies between 22 and 41 weeks, during which amniocentesis have been performed because of intensive fetal monitoring and determination of fetal lung maturity before delivery. In amniotic fluid lamellar body count (LBC) and Clements' foam test have been performed. LBC was estimated on platelets channel in uncentrifuged specimens via a Cell-Dyn 1800 analyzer. All singleton pregnancies due to strict diagnostic criteria were categorized into different study groups; with preeclampsia, chronic placental insufficiency with intrauterine growth restriction, with both gestational disorders, and in the control group. Data were analyzed by dividing pregnancies into cohort gestational age periods: 26-30, 31-33, 34-36 and 37-39 weeks. Gestational age was determined by date of certain last menstrual period and ultrasound examination. The neonatal respiratory under strict diagnostic criteria were reviewed by attending neonatologists. Comparison of the data was performed via non-parametric Kruskal-Wallis test. The Mann Whitney U test was used for subsequent, post-hoc comparison between different groups. $P<0.05$ was considered to be statistically significant for all tests.

Results

: A total of 416 amniocentesis were performed in 378 pregnant women. A group of 306 singleton pregnancies with 378 amniocentesis was defined for the purposes of the main objective of this study. There were 25 preeclamptic pregnancies with 33 amniocentesis; in 74 pregnancies, there was chronic placental insufficiency and IUGR with 89 amniocentesis; and 63 pregnancies were affected by disorders, preeclampsia and IUGR with 95 amniocentesis. The control group comprised 144 pregnancies with 161 amniocentesis. In the period between 26-30 weeks and after 37 weeks of pregnancy there were no statistically significant differences in amniotic fluid LBCs between study groups of patients. The median LBCs was lowest in preeclampsia (8000/μL amniotic fluid); statistically significant differences were found between preeclampsia and IUGR ($p=0.022$) and preeclampsia with IUGR ($p=0.031$). At 34-36 weeks, significantly lower concentrations of LBC was found in the preeclamptic group ($p=0.026$) and both gestational disorders ($p=0.004$) than in IUGR group. During the same period, the median LBC in group of preeclampsia and IUGR was significantly lower than in controls ($p=0.04$). Respiratory distress syndrome (RDS) was diagnosed in 34 newborn, mild in 11 cases, moderate in 10, and severe in 13 neonates. Significantly lower LBCs was found in neonates with RDS ($p<0.001$). Lower values of LBCs ($p<0.001$) were found in neonates with mild, moderate and severe RDS. In 32 cases of twin pregnancies there was no difference in LBC between the first and second twin, and the difference was not detected neither by comparing twin and singleton pregnancies of the same gestational age.

Conclusion

Significantly lower values of amniotic fluid LBC was found in preeclamptic pregnancies in relation to other pregnancy groups, indicating its negative effect on fetal lung maturity and a higher risk of respiratory distress syndrome in infants born between 31-36 weeks of gestation.

Key words: : Amniocentesis; Amniotic fluid; Fetal lung maturity; Intrauterine growth restriction; Lamellar body count; Neonatal respiratory distress syndrome; Preeclampsia

Presenter name: Tea Stimac

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EXTREMELY PRETERM BIRTH. A RETROSPECTIVE STUDY

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Introduction

Extremely preterm birth comprises a problem for the contemporary obstetrics. Newborns born between 22-28 weeks of gestation are extremely premature and they spend first month of their life in hospitals under close surveillance of medical specialists. Nursing of these children requires a significant investment. Since 2012, in Russian Federation births are classified as preterm starting from 22nd week of gestation.

Materials and Method

A retrospective analysis of patient histories of extremely preterm births (22 - 28 weeks of gestation) for 2012-2014y was done. Patient histories of 40 births were taken into study; 31(77.5%) were singleton, 9(22.5%) were twins.

Results

The total number of births during 2012-2014y in our center was 8552; 622(7.27%) were preterm(22 - 37 weeks of gestation); 40(6.43%) were extremely preterm. The average age of women with singleton pregnancies(SP) was 32±4, and with twin pregnancies(TP) was 32±6 years. 14(45.16%) women with SP and 5(55.56%) women with TP were primipara. 17(54.84%) women with SP and 4(44.44%) with TP were multipara. Average gestational age was 25w 3d±1w 4d for singleton births, and 25w±1w 3d for twin births. 22(70.97%) women with SP and 7(77.78%) women with TP had vaginal delivery; and 9(29.03%) and 2(22.22%) underwent cesarian section, respectively. Pregnancy occured after IVF in 2(6.45%) women with a SP, and 5(55.56%) women with TP. 8(25.81%) singleton and 6(66.67%) twin pregnants were diagnosed with cervical incompetence(CI). 12(38.71%) singleton and 4(44.44%) twin pregnants had premature rupture of membranes(PROM). 8(25.81%) SP were complicated with moderate or severe preeclampsia, 1(11.11%) TP was complicated with severe preeclampsia. 7(22.58%) women with SP and 3(33.33%) women with TP had high risk of hereditary thrombophilia. The histological examination of the placentas revealed subcompensated and decompensated placental insufficiency(PI) in 27 pregnancies. In total, 49 children were born. Survival rate of fetuses until the 7th day of life was studied. From 31 singletons, 3(9.68%) died antenatally, 5(16.13%) died intranatally, 9(29.03%) died during early neonatal period. 14 newborns survived until 7th day of life. From 18 twin fetuses 3 (16.67%) died antenatally, 6(33.33%) died intranatally, 1(5.56%) died during early neonatal period, 8 newborns survived until 7th day of life. Average Apgar score for liveborn singleton newborns was 2.52±1.30, for liveborn twins 3.11±1.45. Average weight for liveborn newborns was 847±299g and 799±170g for singletons and twins, respectively. 18(58.06%) SP and 8(44.44%) TP were associated with intrauterine infection.

Conclusion

Taking into account the significantly high rate of CI, PROM and PI, the timely diagnosis and prolongation of pregnancy is very important. Every day of prolongation of pregnancy increases fetal survival. Timely diagnosis and correction of CI contributes to prolongation of pregnancy and reduces risk of PROM.

Key words: Extremely preterm birth, cervical incompetence, premature rupture of membranes,
Presenter name: Gabriel Sargsyan

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The missing link: Perineal techniques and the upright position in the second stage of labour

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Introduction

Most vaginal births are associated with some form of trauma to the genital tract. To avoid perineal injuries by different birth positions and perineal techniques is an everlasting discussion. Upright position in the second stage of labour seems to be a handicap for perineal protection. There is no evidence about correlation between hands on or hands of and perineal injuries. But some new Scandinavian studies show better perineal outcomes with active perineal protection. Today a lot of different processes are pooled in the second stage of labour, the (long) period from the superior cephalic position until crowning. The absent of smaller differentiation does not allow a structured discussion and description about the differences in women's needs and midwifery interventions. Could it be possible to find a more precise description of the stages of labour and the corresponding birth positions, by taking a look back at former times obstetric literature?

Materials and Method

Research in historical documents and midwifery/obstetric textbooks from the last 200 years till actual studies about perineal care. Comparing and discussing identical and different recommendations of perineal care with due regard to birth positions.

Results

Earlier times textbooks from the beginning of the 19th century describe six stages of labour and make a split both in the first and second stage of labour. This allows a nuanced reflection and new interpretations of recommendations of different obstetric instructions or interventions. Using the older classification of the stages of labour does not result in the current mismatch between the upright body position and the active perineal protection. This leads to a range of opportunities in women's care and a more precise scientific discussion about the correlation between perineal techniques and birth positions.

Conclusion

Coming back to a more detailed classification will allow a better understanding and more precise discussions about body positions and techniques of perineal care.

Women can move in upright positions as long till the head is crowning and then find a position who is comfortable for themselves and allows a perineal protection with an overview over the perineum.

Key words: perineal care, upright position, birth, history, Scandinavia

Presenter name: Peggy Seehafer

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SAFETY AND EFFICACY OF TRANSCERVICAL AMNIOINFUSION TO RELIEVE VARIABLE DECELERATIONS

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Introduction

Randomized studies have demonstrated the usefulness of amnioinfusion in control of repetitive variable decelerations secondary to funicular compression. The aim of this study was to investigate the success rate of this procedure, factors that might be involved in it and posible maternal/fetal adverse effects of its use.

Materials and Method

Retrospective observational study including 443 pregnant women undergoing transcervical amnioinfusion intrapartum in the presence of celar amniótico fluid.

Results

The success rate of the procedure (decrease or disappearance of decelerations) was 54,2%. Demonstrated a significant reduction in the rate OF cesarean indicated by risk of loss of fetal weillbeing in the responder group compared unresponsive (56,5% vs. 81,8%; p<0,005) No variable has proven to be a good predictor of success of the procedure. No serious adverse effects were reported.

Conclusion

The intrapartum transcervical amnioinfusion allow further labor, resulting in a significant reduction in the rate of cesarean indicated by RPBF. However, this study failed to demonstrate that its use decreases the overall rate of cesarean or improves any other maternal - neonatal outcomes.

Key words: Saline amnioinfusion, repetitive variable decelerations, first stage of labor

Presenter name: A. Puertas

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PREGNANCY IN WOMEN WITH PREVIOUS CERVICAL CONIZATION - A FIVE-YEAR EXPERIENCE AT A TERTIARY CARE HOSPITAL IN PORTUGAL

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Introduction

Despite the growing knowledge on detection and treatment of cervical intraepithelial lesions, there are not many studies regarding the possible complications of pregnancies after conization. Therefore, the goal of our study is to determine pregnancy outcomes in these gestations.

Materials and Method

Retrospective analysis of 21 pregnancies in women with a previous conization surveilled at our institution between 2009 and 2014. Multiple pregnancies and women who did not complete the follow up at our institution were excluded. Descriptive analysis was performed.

Results

Twenty-one pregnant women with previous cervical conization were surveilled at our institution. Two had a miscarriage before 24 weeks of gestation (at 8 and 17 weeks). The mean maternal age was 33.9 years, 42.9% (n=9) were nulliparous. The mean time between conization and pregnancy was 3.65 years (6 months - 13 years). Two women underwent a cerclage during pregnancy (one abdominal cerclage and one by the Shirodkar technique), because of an ecographic finding of short cervix (9 and 10 mm).

Mean gestational age at delivery was 37.3 weeks. The rate of preterm spontaneous deliveries was 18.75 % (n=3) with the minimum gestational age at delivery being 34 weeks. Three elective cesarean sections were performed. The indications were extreme prematurity, breech presentation and the presence of an abdominal cerclage. Of the remaining 16 women, a vaginal delivery occurred in 75% (n=12), half of them after labor induction. The indications for cesarean section were stationary labor (n=2), failed labor induction (n=1) and maternal complication during labor (n=1). The mean newborn weight was 2879 grams (500 - 4100 grams). With the exception of one neonatal death related to prematurity, there was no significant infant morbidity/mortality.

Conclusion

Despite the small number of cases, in our experience, patients who previously underwent a conization did not show an increased risk of adverse outcomes.

Key words: Conization; Pregnancy
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RETAINED PLACENTA AFTER VAGINAL BIRTH – CASE REPORT AND LITERATURE REVIEW

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Introduction

The third stage of labour is defined as the interval from fetal birth to delivery of placenta. When it exceeds 30 minutes, the diagnosis of retained placenta is attained, by which time the hemorrhagic risk increases significantly. Active management is the standard of care and includes oxytocics, uterine massage, early cord clamping and controlled traction.

The prevalence in developed countries is about 3 percent. There are three major causes – trapped, adherens and accreta.

Trapped placenta – it has detached completely, but not delivered, because of cervix closure. Signs of separation occur and the edge of the placenta is palpable through a narrowed cervical os.

Placenta adherens – the retroplacental area fails to contract and the placenta remains adherent. It is easily manually removed.

Placenta accreta – it pathologically invades the myometrium, due to a defect in the decidua. It cannot be easily separated. The major risk factors are previous cesarean delivery and placenta previa.

Materials and Method

Case report and literature review.

Results

A 32-year old, primigravida, healthy, without prior surgeries, underwent vaginal birth at 39 weeks' gestation, after labour induction for gestational diabetes under insulin therapy. The third stage of labour was actively managed. During observation, a small gush of blood was noted, the uterine fundus was contracted, without lengthening of the umbilical cord. Thirty minutes after birth, placenta had not been delivered. The senior attendant and anesthesiologist were informed. The patient was transferred to an operating room in order to proceed to manual extraction of placenta. During the procedure, placenta extraction turned out to be difficult, particularly in some places, causing the removal to be in peacemeal, which was sent to histological study. The patient remained hemodinamically stable, with only mild bleeding and recovered with no other intercurrence.

The histological findings were compatible with focal placenta accreta.

Conclusion

Clinical diagnosis is usually achieved during attempted manual removal.

Although controversial, it is recommended to intervene when the diagnosis of retained placenta is attained - 30 minutes after birth. Manual extraction should be performed under analgesia, with the means to deal with any complication that might arise, keeping in mind the possibility of a previously unknown placenta accreta.

Although definitive therapy of placenta accreta is hysterectomy, in case of focal accreta with only mild hemorrhage, conservative management might be successful.

Retained placenta can arise without warning, even in the low risk setting, with potential life-threatening complications.

The patient should be informed of the potential risks for subsequent pregnancies.

Key words: Retained placenta; Placenta accreta; Third stage of labour

Presenter name: S. Nascimento

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Fetal sacrococcygeal teratoma: a case report

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Introduction

Fetal sacrococcygeal teratomas (SCT) occur in 1–2 per 20 000 pregnancies. Fetuses with this malformation may have associated morbidity and mortality.

Materials and Method

We report a case of a pregnant at 33 weeks with a fetal sacrococcygeal teratoma.

Results

Our patient was a 33 year-old women, gravida 6 para 1, with a history of antiphospholipid syndrome. Third trimester ultrasonographic examination showed a large sacrococcygeal teratoma measuring 10 x 12 cm showing cystic and solid components, severe ventriculomegaly, bilateral hydronephrosis and hydrops fetalis. She went to our emergency department at 33 weeks of gestation by decreased fetal movements. Ultrasound showed intrauterine fetal death. Labor induction was initiated and the delivery was eutocic. The fetal autopsy confirmed the sacrococcygeal teratoma and the other malformations.

Conclusion

Negative prognostic factors for SCT include solid tumors, those detected early in pregnancy, malignant histotypes, polyhydramnios, placentomegaly, and fetal hydrops. This case shows that the presence of fetal hydrops worsens the prognosis of SCT.

Key words: Fetal sacrococcygeal teratoma, hydrops fetalis

Presenter name: A. Castro

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Effacement of the cervix is the key to diagnosis of labour in the Single Cephalic Nulliparous Woman

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Introduction

The diagnosis of labour continues to be a challenge for midwives and Obstetricians worldwide. Much debate is focused on the signs of labour and at what point of cervical dilation we accept or reject this diagnosis. Effacement of the cervix is acknowledged as essential to accurate diagnosis of labour, however there is little consensus on how we record this information. This study reports the findings of cervical examination of 100 single cephalic nulliparous women at gestation ≥ 37 weeks (SCNT) presenting to the National Maternity Hospital for whom the initial diagnosis of labour was rejected and the subsequent time to onset of labour and onset method.

Materials and Method

The clinical records of 100 (SCNT) who presented to the labour ward in December 2014 and had a diagnosis of labour rejected were examined. These women presented with painful uterine contractions, show of blood with mucous, ruptured membranes or a combination of any of these. The women were assessed and the diagnosis of labour was rejected based on cervical assessment. We report on the cervical findings, the subsequent time to labour onset and method of labour onset according to cervical length.

Results

There were 100 SCNT for whom the diagnosis of labour was rejected at first presentation.31/100 women presented with pains only, 48/100 with pains and a show, 17/100 with all three signs of labour and a 2/100 with either show or rupture of membranes (SROM) respectively. The diagnosis of labour was made based on cervical assessment. Time to labour onset was recorded for all women. Cervical assessment was performed in 98/100 Assessment was not performed in 2 cases as active bleeding was noted.

Cervical length was estimated as ≤ 0.5cm in 15/98 (15.3%), as 1cm in 51/100(52%) and ≥ 2cm in 31/100 (31.6%) of cases. Position of the cervix was reported as central in 9/98(9.1%), mid posterior in 33/98(33.6%) and posterior in 56/98(57%) of cases. Cervical consistency was reported as soft in 62/98 (63%) of cases and firm in 34/98(34.6%).

Of the group with cervical length ≤ 0.5cm 10/15 (75%) labour was diagnosed within eight hours of primary assessment. There were 2/15 (6.6%) for whom labour onset occurred within 24hrs of primary assessment. 3/15 (6.6%) cases delivered by caesarean section after 24hrs for pyrexia associated with SROM.

In the group with cervical length of 1cm labour was diagnosed within eight hrs of primary assessment in 20/51 (39%) of cases, and within 24hrs in 10/51(17.5%). There were 21/51 (41%) for whom labour was not diagnosed within 24hrs of primary assessment.

In 31/98 (31.6%) cases where cervical length was reported as ≥ 2cm long 2/31(6.4%)had labour diagnosed within eight hours of primary assessment, 2/31 (6.4%) laboured within 24hrs and 27/31 (87%) did not labour within 24hrs of primary assessment.

The overall caesarean section rate was 20/100 (20%). In the spontaneous labouring group of 66 women the C/S rate was 3/66 (4.5%). In the induced group of 33 the C/S rate was 13/33 (39%). There were 4-pre labour C/S. The indication for induction was fetal reason in 6/33(18%) cases, continued pains in 13/33 (39.3%) of cases and when rupture of membranes was ≥ 24hrs in 14/33(42%) cases.

Conclusion

Women are encouraged to attend hospital when they have symptoms of labour. The diagnosis of labour cannot be made from history alone. Objective assessment of the cervix using the parameters of length, consistency and dilatation is a reliable indicator of labour onset in the SCNT. Effacement of the cervix in the nulliparous woman is however the key to the accurate diagnosis of labour onset. Measurement of effacement is frequently expresses as a percentage. This expression of effacement is highly subjective and does not provide an objective measurement. Cervical length is a definable measurement of cervical length. In this study 75% of women with a reported cervical length of ≤ 0.5cm laboured within 8hrs of primary assessment. Cervical length was the most reliable indicator to diagnosis of labour

Key words: labour, diagnosis, effacement

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The new era in the diagnosis of Gestational Diabetes

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Introduction

The diagnostic criteria for gestational diabetes (GD), changed in 2011, are: in the 1st trimester fasting blood glucose levels ≥92 mg/dl, and in the 2nd trimester at least one of the oral glucose tolerance test values altered (≥92 mg/dl in the fasting state, ≥180 mg/dl in the first hour and ≥153 mg/dl in the second hour). DG is a condition that increases the risk of maternal and perinatal complications, so the study aims at evaluating the obstetric and neonatal outcomes in pregnant women diagnosed after the change of criteria.

Materials and Method

A retrospective study including pregnant women diagnosed with DG, monitored in the authors' Department between January 2011 and March 2014. The following parameters were assessed: maternal age, body mass index (BMI) prior to pregnancy, family history of diabetes, gestational age at diagnosis, preterm delivery, type of delivery, birth weight and Apgar score at 5 minutes.

Results

During the study period 374 women were monitorized 202 of whom were diagnosed in the 1st trimester and 167 in the 2nd trimester. Their age was between 17 and 45 years old, with an average age for pregnant women diagnosed in the 1st trimester lower than for those who had later diagnosis (31.6±5.337 vs 32.8±5.392). Most of the women (70.1%) did not report a family history of diabetes. However, there were a greater proportion of women referring family history in the ones who were diagnosed in the 1st trimester (55.6% vs 44.4%). In the sample, 35.3% had normal BMI prior to pregnancy, 36.9% had overweight and 22.7% were obese. Regarding the type of delivery, there was a normal vaginal delivery in 44.4% of cases, instrumental vaginal delivery in 18.2% of cases and 27.8% of all deliveries were cesarean sections. There were 32 preterm births, with 63.3% of them in pregnant women with DG from the 1st trimester. There were 11 macrosomic newborns and no Apgar scores at 5 minutes of birth less than 7.

Conclusion

There was a higher number of pregnant women diagnosed in the first trimester, characterized by being younger and with a most prevalent family history of Diabetes. However, the reduced incidence of macrosomia may be related to the timely introduction of appropriate therapy or dietary habits, which may have been boosted by changes in diagnostic criteria with a greater number of early diagnoses.

Key words: Gestacional Diabetes, risk factors, maternal and perinatal complications

Presenter name: Ana Helena Fachada

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Elective vs intrapartum cesarean-section for Breech Presentation: is there any difference in maternal and neonatal outcomes?

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Introduction

The issue of how to manage and plan delivery in breech presentation is controversial, but caesarean section has been suggested as a way to reduce adverse perinatal outcome. Women assigned to an elective cesarean delivery may go into labor prior to the scheduled date of surgery. As so, the purpose of this analysis was to determine if maternal and neonatal outcomes are adversely affected when cesarean delivery is preceded by labor.

Materials and Method

Retrospective study of 304 cesarean deliveries for breech presentation at a gestational age ≥37 weeks, from January of 2012 to October of 2014. Two groups were considered according to the timing of cesarean: elective/unlabored (group A) (n=167) versus intrapartum/labored (group B) (n=134). We compared population's characteristics, maternal morbidity and neonatal outcomes in elective versus intrapartum caesarean deliveries for breech presentation.

Results

During the referred period, there were 1861 cesarean deliveries, of which 304 were due to breech presentation; there were 54,9% elective (group A) and 44,1% intrapartum (group B) c-sections.

The majority of women were nulliparous (77,8% vs 62,4%) and the median maternal age was 32 years old in both groups. The median gestational age at delivery was 39 weeks in group A and 38 weeks in group B. The median birth weight (3130g vs 3253g) did not differ significantly between groups. Maternal complications occurred only in group A (n=2/167), caused by uterine atony requiring blood transfusion (p=n.s.). Neonatal outcomes were similar in both groups and no low apgar was registered. However, the newborn physical examination was suspicious for traumatic injury in 5,4% in group A and 2,9% in group B (p= n.s). Newborn admissions in the neonatal intensive-care unit were 1,2% and 0,7% (p= n.s.), respectively.

Conclusion

We found no significant differences in maternal and neonatal outcomes between c-sections for breech presentation performed before or during labor. The tendency, without statistical significance, is even slightly favorable to c-sections done during labor.

Key words: Cesarean section; Breech presentation; elective; intrapartum; maternal outcomes; neonatal outcomes

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FAILED LABOUR INDUCTION: CAN WE IMPROVE IT?

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Introduction

Induction of labour (IOL) is a process of artificial stimulation of uterine contractions after the age of fetal viability and before spontaneous onset of natural labour, with the aim of achieving vaginal delivery. The rates of IOL are rising all over the world and, even not knowing the Portuguese reality, in Funchal's Hospital (FH) is estimated to occur in 33.1% of all pregnancies in the last five years. It is known that the process of IOL has its own medical risks and is associated with an increased risk of caesarean delivery, some of them justified by failed IOL. Several authors proposed various definitions of failed IOL, but none has been universally accepted.

The objective of our study was to analyse caesarean rates due to failed IOL in FH.

Materials and Method

A retrospective study was performed between January 2010 and December 2014. Data was collected from hospital individual patient records. Inclusion criteria were correctly dated unifetal pregnancy, Bishop Score <7, and induction of labour with dinoprostone.

Failed induction was assumed when the women did not enter in active labour, the cervical score did not improve or the cervix did not dilate more than 3 cm after a 12h period of regular uterine contractions.

Results

In the study period (Jan 2010-Dec 2014), in FH, there were 10041 births, being caesarean 2755 (27.4%). IOL was performed in 3322 women (33.1%) and the main reasons for induction were gestational age of 41 weeks (44.0%), preterm membrane rupture (36.0%), feto-placental pathology (10.3%) and maternal pathology (9.6%). The number of caesarean deliveries in the induced group was 816 (24.6%); 87 caused by failure of IOL (7.2%). In this subgroup (n=87), mean maternal age was 32.9 years (17-44); 77.0% were nulliparous and 17.2% had previous uterine scar. Gestational age of 41 weeks was the leading indication for unsuccessful IOL (43.7%); there was no increase in fetal mobility.

Conclusion

Rates of IOL are rising worldwide.

Prolonged pregnancy is one of the most common indications for IOL.

In our study, failed IOL was responsible for 7.2% caesarean delivery, majority in nulliparous women.

In the absence of fetal or maternal complications and with adequate surveillance, repeat induction should be attempted to improve chances of vaginal birth.

Uniform criteria to define and manage failed IOL are needed. More studies should be designed to achieve the ideal strategy.

Key words: labour induction, failed induction, caesarean rate

Presenter name: Cristina Pestana

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HOW TO GIVE BIRTH IN POLAND – DEVELOPMENT OF POSSIBILITIES AND RECENT CHANGES

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Introduction

Despite quite similar ways of midwives education programs in Europe, models of perinatal care vary in different countries. This variety comes not only from diverse health care politics but also mentality and the perception of childbirth. Moreover, two opposite trends are observed: medicalisation of childbirth with growing number of ceasarian section and rising interest in natural, non-medicalised delivery.

Materials and Method

The study used Polish scientific reports published in the database PubMed and Polish medical literature. The literature was analyzed in such aspects as: hospital birth, birthcentre, home birth, midwifery perinatal care in the context of changes in last decade. The analysis of the Polish model in the context of Polish Perinatal Care Standard from 2011 as a example of the considerable transformation of perinatal care was made in particular. In addition, a review of the literature in terms of procedures, results and the functioning of alternative perinatal care has been made.

Results

Analysed literature showed the importance, necessity and wide range of changes that have taken place in perinatal care for women in Poland. There are still areas which should be developed, like the availability of alternative places for hospitals such as birth centres/ midwife-led units.

Conclusion

After decades of the so-called “concrete obstetrics” in Poland positive changes can be observed, both in the Polish law and Polish hospital unites. However, there are some solutions not common enough which should be considered as beneficial for childbearing women and could be used were needed in Poland.

Key words: hospital birth, birthcentre, home birth, midwifery perinatal care

Presenter name: Julia Nawrot

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METABOLIC SYNDROME AS A MAIN RISK FACTOR FOR THE DEVELOPING OF PRE-ECLAMPCIA AND FETAL HYPOXIA AT WOMEN WITH OBESITY

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Introduction

Gestational hypertensia and pre-eclampcia are the most prevalent complications of pregnancy, developing at women with obesity against on metabolic syndrome (MS).

Materials and Method

To study of prevalence of pre-eclampcia and fetal hypoxia at pregnant against on accompanied number of components of a metabolic syndrome (MS) 107 pregnant women with obesity clinical laboratory established of MS, admitted to the pregnancy pathology department with various complications (main group) were under observation. The body mass index of pregnant women was above 30 kg/m2. Control group was made by 45 pregnant women without obesity. All pregnant women from main group were divided into 3 groups in depending on stage of obesity and number of accompanying components of MS. The first group consisted of 42 women with two components of MS, 35 women with three components of MS were included to the second group and the third group was formed by 30 patients with four components of MS. The functional condition of fetoplacentary system was estimated by the dopplerometic investigation of placental blood flow on III trimester of pregnancy.

Results

The obtained data testify to much frequent complicated current of pregnancy at women with MS. The most frequent maternal complication against of MS and women with obesity was a pre-eclampcia, and its prevalence almost on 10 times exceeds at pregnant women from the third group (at 57) at women in control group. Pays attention also high frequency of intrauterine grows restriction and chronic pre-natal fetal hypoxia. The individual analysis has revealed, that with severe pre-eclampcia - 16 pregnant (28%) from all number with pre-eclampcia have made the greatest number of women of the patients from third group, 8 (14,0%) from the second group and 1 pregnant woman (2,3 %) from the first group.

At research of respiratory movements of a fruit at 36 pregnant women with MS it has appeared, that if the respiratory index at healthy pregnant women makes 63,1%, then at pregnant women with a metabolic syndrome depending on number of components it was varied about 43,8 % - 35,7% i.e. reduction of a respiratory index was more considerable at patients with 3 and 4 components of MS. These patients were with complicated current of pregnancy – pre-eclampcia, chronic fetal hypoxia, a current of pregnancy with symptoms of threat of interruption of pregnancy. Indicators of vascular resistance in маточных arteries of pregnant women with 3 and 4-mja components MC have appeared above standard sizes. Indicators of an index of resistance testify to infringements of fetoplacentary blood circulations which are most expressed at pregnant women II and Ш groups. Difference of RI at pregnant women 1st and control group statistically is not authentic. Pays attention to significant decrease of bloodstream in the arteries of middle brain artery at fetus of pregnant women with four components of MS ($p<0,05$). Infringements of fetoplacentary systems at pregnant women being confirmed by haemodynamics indicators on umbilical cord artery, where fixed increasing of sistolic-diastolic resistance. Received dates from dopplerometric investigations were approved also clinically appearances. So, intrauterine grows restriction has appeared at 29 pregnant women with MS (27,1 %), in comparison with control group in which the IUGR was developed at one woman (4,4%). Chronic pre-natal fetal hypoxia was diagnosed at 28 (26,1 %) women from main group, against 4,4 % in control group.

Conclusion

Thus, the current of gestation at pregnant women with obesity against MS proceeds with complications both mother and fetus, frequency and which severity level depends on number of components of MS. Pregnant women with obesity and MS an make risk group on current complications of gestation and developing of pre-eclampcia. Pregnant women with obesity are necessary for surveying on presence of MS and degrees of its expressiveness for the purpose of the prevention of obstetrical and perinatal complications, and also to spend a dopllerometric investigations - for the purpose of definition of maternal –fetal-placental bloodstream .

Key words: pre-eclampcia, obesity, metabolic syndrome
Presenter name: Zulfiya Shamsiyeva

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PERINATAL ISCHEMIC ARTERIAL STROKE – A CASE REPORT

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Introduction

Perinatal ischemic arterial stroke has an incidence of 1/5000 to 1/2800 live-births and is the most common form of cerebral infarction in children. However, it is not often recognized in the peripartum period but only later when motor impairment becomes apparent.

Materials and Method

Patient files regarding a case of perinatal ischemic arterial stroke were assessed.

Results

A 36 year-old nulliparous presented to our Department. She was 40 weeks pregnant and had had regular low-risk surveillance with no complications. She was admitted due to decreased fetal movements for the previous six hours, without any further complaints. The initial cardiotocographic record showed normal fetal heart rate and variability, but absent reactivity; there were periods of signal loss and the presence of decelerations could not be ruled out. The obstetric ultrasound conducted revealed a fetal growth in the 3rd centile, with an amniotic fluid index of 6.3 cm. The umbilical artery and middle cerebral artery pulsatility indexes were normal. The patient was admitted to our labor ward for likely induction of labor under continuous fetal monitoring. However, given a decrease in fetal heart variability with recurrent spontaneous decelerations, an emergent cesarean section was decided for suspected antepartum fetal hypoxia. A male newborn was delivered, weighting 2690g with an Apgar score of 7/10. The umbilical cord gasometry was compatible with mixed acidosis. In the second day of life the newborn became hypotonic and a weight loss of 11% was documented. An MRI revealed an extensive ischemic arterial stroke of the right hemisphere, with absent flow in the right middle cerebral artery and older lesions in the cerebellar hemispheres. Thrombophilia studies only revealed a low functional C protein (35%), which normalized at the age of 8 months. Given the development of hypotonia and left hemiparesis, rehabilitation was started in the neonatal period. The last assessment of the child was conducted at the age of 24 months. So far there has been a good cognitive and verbal development with a slightly asymmetric walking and an asymmetry in the posture and use of hands, which is being corrected with the aid of a hand splint.

Conclusion

In this case, it is likely that two ischemic events occurred, possibly one before and the other one after delivery. Continuous fetal heart rate monitoring was essential to the prompt diagnosis of antepartum fetal hypoxia and subsequent decision to perform an emergent cesarean section. We advocate that continuous fetal heart rate monitoring should be the preferred technique for the assessment of fetal wellbeing in the labor ward whenever possible. The prompt fetal delivery and diagnosis of perinatal ischemic arterial stroke in the neonatal period allowed for an early start of rehabilitation procedures to lessen long-term sequels.

Key words: perinatal ischemic arterial stroke, continuous fetal heart rate monitoring

Presenter name: Carolina Vaz de Macedo

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LOW MOLECULAR WEIGHT HEPARINE ON THE PREVENTION OF THE POSTOPERATIVE THROMBOEMBOLIC COMPLICATIONS IN WOMEN WITH UTERINE MYOMA

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Introduction

On the dates of published by organizing of Russian committee (2000) and International (2002) and American (2004, 2011) phlebology consensus, at the present in clinical practice, the preference is given to the Low molecular weight heparins (LMWH) on prophylaxis of postoperative trhomboembolic complications . As, numerous researches have shown, that they have the best preventive effect, to applying of them more conveniently, and number hemorrhagic complications more low.

Materials and Method

To estimate efficiency of LMWH administering in the prevention of postoperative thromboembolic complications 20 Women (I group) aged above 40 years (average age was 45±4 years) with uterine myoma were included to the studying. All patients admitted to the Department of operative gynecology of RSSPMC of O&G with the diagnosis of uterine myoma for the operative treatment. They all have exposed to the abdominal hysterectomy by indications, as a preference method of anesthesia in majority cases we have administered of spinal anesthesia (SA). For comparison of LMWH efficiency there were conducted retrospective studying of 58 case histories of patients (II group) at the similar age with the investigated group, which underwent abdominal hysterectomy due to uterine myoma in the Department of operative gynecology of Republic specialized scientific practice medical centre of obstetrics and gynecology (RSSPMC of O&G) during the period from 2005 up to 2008 years. They all on purpose preventing postoperative thrombotic complications had received unfractionated heparin (UFH) subcutaneously in dose on 2500 IE 3 times a day. 20 Rather somatically healthy women at the reproductive age without any concurring gynecologic diseases we have included to the control group. The estimation of haemostasis state was conducted in dynamics prior to and on 1st, 3rd, 7th days in the postoperative period in haemostasiological laboratory of RSSPMC O&G with using of reactants of firm Barnaul (Russia) which included in itself definition: activated partial thromplastine time (APTT), prothrombin time (PT), prothrombin ratio (PR), amount of soluble fibrin - monomer complexes (SFMC), and fibrinogen, platelets count (PLC).

Results

Duration of operative intervention in investigated group averaged about 65 minutes, average volume of hemorrhage during operation was 200 ml; and at II group, these rates were 95 minutes and 350 ml accordingly. All investigated patients were carried out nonspecific preventive maintenance. Pharmacological prophylaxis in I group patients was conducted with LMWH Clexan (Enoxaparin, Sanofi Aventis, France) in a daily dose of 4,0 ml once a day subcutaneously in the field of abdomen. The subsequent doses began at once after 8 hours of the performed operation. Results of the analysis coagulogram conducted in dynamics at II group patients sharply differed from I, and results of comparison with I and control group were statistically significant ($p < 0,05$). Dynamic analysis screening laboratory indices for 7th day on the postoperative period in patients from II group was accompanied by increasing of fibrinogen on 53,5 % (4,3±0,7 г/л), SFMC on 82,5 %, (7,5±0,6 mg%), with simultaneous shortening APTT on 15,6 % (31,8+6,3 sec) in comparison with initial level which was before operation (2,8±0,6g\l, 4,1±1,1 mg %, 37,7±5,2 sec accordingly), that testified about prethrombotic state. Postoperative decrease platelet quantity was found out in patients of II group for 3rd day (229,0±66,7). On the contrary, at carrying out thromboprophylaxis with LMWH another haemostasiological pattern at control laboratory research in dynamics in comparison from II group patients, which accompanied decreasing of SMFC on 10,5 % on 3rd day (3,4±2,9мг %) in the postoperative period, in comparison with initial level (3,8±0,6 mg%).

Conclusion

Taking in account results of our research, Clexan is possible to consider as the preparation of the choice effectively preventing of activation of coagulation system at expanded operations performed due to uterine myoma in patients aged after 40 years. Administering Clexan in gynecologic practice in women with uterine myoma concerning to the high risk of development thromboembolic complications is expedient.

Key words: thromboembolic complications, uterine myoma, low molecular weight heparine

Presenter name: Nodira Mamadjanova

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LABOR: IS IT DIFFERENT IN STILLBIRTHS?

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Introduction

Management of labor and delivery in stillbirth depends upon the cause and time of intrauterine fetal death. It may involve waiting for spontaneous labor or planning an induction. Various methods of induction are used for intrauterine fetal death (IUFD): prostaglandin-E1-analogue, misoprostol, anti-progesterone, mifepristone, oxytocin and mechanical methods such as cervical ripening and laminaria. Although these methods are well studied there is lack of literature on how stillbirth may influence labor's course. Our goal is to see if labor pattern in stillbirth and intrauterine fetal death is different.

Materials and Method

Retrospective case-control study. Twenty-six women at 24 to 41 weeks of pregnancy with spontaneous intrauterine fetal death (IUFD) occurring between January 2011 and December 2014 in Hospital de Cascais, compared with 28 matched controls. Spontaneous and inducted births were compared between both groups. SPSS version 21 was used for statistics analyses.

Results

Population was similar regarding the parity (14 nulliparous in IUFD group vs. 16 in control group). There were no significant differences in rate of instrumented vaginal delivery or cesarean section (30,8% in IUFD vs. 46,4% and 19% in IUFD vs. 17%, respectively). Cesarean section was performed for maternal causes in all cases of IUFD and labor arrest was the main indication in control group. There was no statistical difference in time between induction and delivery (20+-2 vs. 20+-4 hours).

Active phase, first and second stage were significant lower in the IUFD group (2,7±1,8 hours in IUFD and 5±3,1 hours in control group for active phase and 8,1±5,3 minutes in IUFD group vs. 20,2±14,3 minutes in control group for second stage - p 0,01 and p 0,001). Rate of epidural analgesia was also statistically significant, much higher in the control group (50% in IUFD and 92,9% in controls - p 0.001).

Conclusion

The findings of our study suggest that progression of labor is faster in women with intrauterine fetal death, as there is a reduction in length of labor (first and second stage).

Key words: Stillbirth; labor

Presenter name: Sara Proença

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PERITONEAL DECIDUOSIS: DO WE KNOW THIS ENTITY?

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Introduction

That's the case report of peritoneal deciduosis in Mendaro Hospital in 2014. Peritoneal deciduosis is a physiological process during pregnancy exposed as decidual implants outside the uterus. These implants are mostly microscopic, and rarely macroscopic, being able to see them by chance in the course of a C-section or other types of surgery in pregnant women. It is important to establish the differential diagnosis since peritoneal carcinoma or mesothelioma are two of the diseases that must be ruled out.

Materials and Method

Thirty-three year old woman in labor process is taken to the operation room for a C-section due to alterations in the cardiotocography. During surgery doctors appreciate some patched, friable, reddish implants in the serosa of the distal ileum and distal half of the appendix. Rest of the visualized organs, womb and adnexa without findings.

Results

Pathology results: Sections of the appendix show nodules of decidual tissue in subserosa-serosa and focally muscularis, with discrete chronic inflammation associated with lymphoid follicular hyperplasia. Morphological image is compatible with ectopic decidual reaction (deciduosis) in studied material. Immunohistochemistry is compatible with peritoneal deciduosis.

Conclusion

• Deciduosis, despite being relatively frequent in its microscopic form, is rarely seen macroscopically, so it is a little-known entity. • It has been described in ovaries, cervix, Fallopian tubes, renal pelvis and appendix. • It normally courses asymptomatically and rarely produce signs, which could be abdominal haemorrhage, appendicitis and paralytic ileus. • When its shape is diffuse differential diagnosis should be done amongst tumour metastasis and mesothelioma. Immunohistochemistry give certainty diagnosis. • It usually regresses after delivery although it can re-emerge in forthcoming pregnancies. • During a C-section (more common surgery in pregnant women) uterus and adnexa are usually explored, but rarely are the rest of the abdominal organs and if so, it is complicated due to the size of the womb and the type of incision. That's why taking into account this entity is so important.

Key words: Peritoneal, deciduosis, pregnancy, C-section.

Presenter name: Cristina Pérez Fernández

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EPISIOTOMY OR SPONTANEOUS PERINEAL LACERATIONS: CONTROVERSIES AND EVIDENCE

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Introduction

The responsibility of health professionals in the exercise of its functions is complex and can easily lead to effective accountability for damages.

It's urgent reflection and research on procedures carried out in the body of the "other" and, specifically, on the episiotomy - highly questioned procedure, knowing only that it was introduced in clinical practice without any scientific support. The current scientific literature finds that failing to fulfill its supposed objectives.

Materials and Method

We proceeded to a literature review on the subject in focus, using the search descriptors “episiotomy” and “perineal lacerations” with boolean operator AND, in the “Discovery UP”system (of the University of Porto) wich includes the following databases: Academic Search Complete, CINAHL, PubMed, SciELO, Scopus, UpToDate e Web of Science); in the Cochrane Database of Systematic Reviews we used just “episiotomy” as descriptor.

Were considered eligible all the articles available in full text, with the abstract in english language, and that were produced since 2010; the electronic research took place in the months of December 2014 and January 2015.

Results

After application of the inclusion criteria, were selected 21 articles.

The current scientific literature reveals that episiotomy does not meet their supposed objectives, and recommended its selective use. It’s for health professionals to adopt intrapartum perineal conservation measures, such as freedom of movement in the second stage of labour, focusing on upright postures and the use of spontaneous pushing efforts.

Conclusion

Simple interventions like o (prior) consent or dissent informed the user to perform episiotomy, after reporting their indications, registration of the reason episiotomy was performed in the clinical process of the woman, use of alternative measures such as the application of warm compresses on the perineum during the phase of "crowning" of the fetal head are measures suggested in the literature, that will impact the level of reflection on the theme as well as the eradication of indiscriminate performing episiotomy.

Several authors give importance to the analysis of the reasons given by the professionals to the use of episiotomy as an important and fundamental step to reduce the utilization rates of this invasive procedure. Urges the eradication of practices based on fear, desire to control the uncontrollable and the lack of knowledge about the evidence.

Key words: perineum; intrapartum care; lacerations; episiotomy; history; midwives.

Presenter name: Sofia Inês Borges Rodrigues

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ACUTE FETAL DISTRESS: THE FIRST SIGN OF A RARE PHENOMENON

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Introduction

The primary goal of Fetal Heart Rate (FHR) monitoring is to identify hypoxemic and acidotic fetuses in whom timely intervention will prevent death. A secondary goal is to avoid fetal neurologic injury, if possible. Sometimes the abnormal FHR patterns can be the first and only sign that something is wrong in an uneventful pregnancy, even in the rarest situations.

Materials and Method

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Results

A 30-year-old primigravida woman was admitted to our hospital with reduced fetal movements at 37 weeks' gestation. She was a healthy woman like her husband (no consanguinity), with no family diseases. The course of the index pregnancy had been uneventful.

It was performed a nonstress test (NST), which revealed a sinusoidal pattern. The ultrasound evaluation was remarkable for absent fetal movements and oligohydramnios.

In the presence of this NST and a low modified biophysical score, the decision was made a Cesarean section. A 3410-g healthy male infant was delivered, with an Apgar score of 10 at 5 min.

The newborn started a distress respiratory syndrome forty minutes after birth, starting oxygen therapy. On physical examination, it was noted a progressive abdominal swelling, firstly in the infraumbilical region and then across the whole abdomen, lumbar region and scrotum. He was transferred to a neonatal intensive care unit.

The abdominal sonogram performed there revealed a thrombosis of the Inferior Vena Cava (IVC) with 54.5mm x 8mm. And an enlarged and hyper-echogenic left kidney.

He started anticoagulation therapy with heparin and a fibrinolytic agent, the tissue plasminogen activator. There was an initial improvement with swelling reduction.

At 4th day of life, there was a severe clinical worsening of the newborn who needed invasive ventilation. The diagnosis of left-hemisphere ischemic stroke and right-hemisphere haemorrhagic stroke was made, with an important mass effect.

It was performed a decompressive craniectomy with the partial removal of the cerebral intraparenchymatous hematoma and the subdural hematoma drainage.

At 6th postsurgical day, he was hemodynamically stable. He had some spontaneous movements, anisocoric poorly reactive pupils and normal grasp reflexes.

Actually (two months later after birth), he is hemodynamically stable with spontaneous respiration, feeding by nasogastric tube. Normal ponderal index. The neurologic status is the same with only a single convulsion until now.

The thrombophilia investigation and genetic tests are still in course.

The maternal postpartum course was uneventful.

Conclusion

Intrauterine fetal venous thrombosis is a rare phenomenon, probably attributed to a multifactorial process. These factors may include inherited thrombophilia as well as prothrombotic clinical conditions.

Prenatal thrombosis of the fetal renal veins and/or the inferior vena cava was previously described in 12 case reports.

The median gestational age at presentation was 32 weeks, with a range of 25–38 weeks. The clinical presentation varied from overt hydrops fetalis (33.3%), via fetal distress (41.6%), to an incidental ultrasonic finding in otherwise normal pregnancies (25%). Reduced fetal movements (42%) can be presented. The FHR monitoring in these cases revealed signs of fetal distress: absent accelerations, decreased short-term variability, variable or late decelerations and sinusoidal pattern. The modified biophysical profile of these fetuses was likewise low.

An Acute Fetal Distress can be the first and only sign of these kind of events. And it is crucial to identify the abnormal FHR patterns to act and prevent a bad outcome.

Key words: Acute Fetal Distress, Fetal Heart Rate Monitoring, Intrauterine fetal venous thrombosis, Prenatal thrombosis of the fetal inferior vena cava

Presenter name: Filipa Paixão Barradas

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EPISIOTOMY: FROM HISTORY TO EVIDENCE

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Introduction

The responsibility of health professionals in the exercise of its functions is complex and can easily lead to an effective accountability for damages. Urges reflection and research on the procedures performed in the women's bodies during all the reproductive process and, particularly, during childbirth.

The practice of episiotomy in normal birth assistance was introduced routinely, without any scientific support and is a highly questioned procedure nowadays - whether by women/couples, either by professionals involved childbirth care.

Materials and Method

We proceeded to the systematization of the evolution and changes in intrapartum perineal care provided by midwives over time, through a systematic literature review - in response to the PI(C)O question "What is the historical evolution of the practice of episiotomy performed by midwives?".

Were used the search descriptors "episiotomy" and "history" with Boolean operator AND, in the "Discovery UP"system (of the University of Porto) which includes the following databases: Academic Search Complete, CINAHL, PubMed, SciELO, Scopus, UpToDate e Web of Science); in the Cochrane Database of Systematic Reviews we used just "episiotomy" as descriptor.

Were considered eligible all the articles available in full text and in portuguese, english or spanish language; the electronic research took place in the months of December 2014 and January 2015.

Results

After application of the inclusion criteria, were selected 16 articles.

Midwives work within the paradigm of normal birth - this is their expert area. However, over the years, and apparently influenced by

a strong confluence of factorsly, some aspects of its performance have changed, including the forms of intrapartum perineal care.

Conclusion

In the twentieth century, with the advent of the birth hospitalization, there is a broad generalization of episiotomy, which has become routine with prophylactic indication in all births. In the 80 episiotomy was the dominant form of perineal care, without investment in forms of perineal protection, and its benefits begin to be questioned by users and professionals.

In 2000 comes the publication of scientific evidence that demonstrates the benefits of selective practice on the systematic / routine, which was pelleted by subsequent updates.

There is consensus to change the paradigm of childbirth as a normal event for "medical condition" in that episiotomy was assumed as a common consequence.

Key words: episiotomy; history; midwives.

Presenter name: Sofia Inês Borges Rodrigues

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The electrohysterogram for monitoring uterine contractions during term active labour: a systematic review of the literature

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Introduction

Monitoring uterine activity is one of the main intrapartum measurements to evaluate fetal well-being and to prevent tachysystole during high-risk childbirth. Current uterine monitoring techniques have major drawbacks. The standard external tocodynamometer (TOCO) loses signal in case of excessive maternal movements or maternal obesity. The alternative is an invasive intra-uterine pressure catheter (IUPC), which requires ruptured membranes, three centimetres of dilation and carries some rare but serious risks. Electrohysterography (EHG), reporting the electrical activity of the uterus, is a potential new technique for monitoring contractions during term labour. Last decades, mathematical models and technical improvements enabled EHG to be feasible as real-time tocographic method in daily practice. The objective of this review is to describe the accuracy of EHG for monitoring contractions during term active labour in comparison with IUPC and TOCO.

Materials and Method

We performed a systematic search in the electronic databases of MEDLINE, EMBASE and Cochrane. For this review, studies describing EHG for monitoring uterine activity in pregnant women during term active labour were included. EHG should be compared with either IUPC or TOCO. The study language was restricted to English. Study protocols, guidelines, case reports, reviews and non-human studies were excluded. To assess eligibility of the studies, two authors independently appraised and cross-checked the extracted studies.

Results

A total of 129 articles have been systematically identified. After selection, 19 articles were eligible for inclusion in this review. Divers studies reported a high sensitivity and high contraction consistency index (CCI) of EHG for contraction detection: respectively 86-95% and 75-94% with IUPC as gold standard. Moreover, EHG performed significantly better compared to TOCO (sensitivity resp. 89% vs. 62%, $p<0.001$, CCI resp. 90% vs. 64% $p<0.05$). The study of Euliano et al. also showed that EHG is capable of registering contractions in obese women whereas the TOCO fails because of the increased fatty layers. Another prospective study showed a similar rate of interpretable tracings between physicians for EHG (87%) and IUPC (95%), with a significantly lower rate for TOCO (68%). Furthermore, EHG demonstrated a significant higher percentage of ‘adequate’ recordings (recognizable and reliable pattern with a baseline calibration) compared to TOCO in both first (177 vs. 154 min) and second stage (80 vs. 68 min). Obstetricians in this study also evaluated the assessment of EHG-based tocogram ‘easier’ (scale 1-3, 1.1 vs. 2.4, $p<0.001$).

Conclusion

EHG is an accurate non-invasive method to detect contractions during term active labour with a high sensitivity of 86-95%. Furthermore, EHG performed significantly better compared to TOCO with respect to sensitivity, contraction consistency index, interpretable tracings, adequate recordings and tocogram assessment.

Key words: Electrohysterography, uterine monitoring, tocogram
Presenter name: Marion Vlemminx

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Episiotomy Practice: Changes and Evidence

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Introduction

Episiotomy during vaginal delivery was first recommended in 1920 as a way to protect the pelvic floor from lacerations and protect the fetal head from trauma. It was rapidly adopted as a standard practice and it has been widely used since then. However, over the last decades, there has been a growing body of evidence that episiotomy may contribute to more severe perineal lacerations and future pelvic floor dysfunction.

The principal objective is to describe episiotomy usage in vaginal delivery at IDC- Hospital General de Catalunya. The secondary objective is to describe the patient characteristics (like parity or infant birth weight) that increase the risk to require an episiotomy and involve severe lacerations.

Materials and Method

We have used a Hospital General de Catalunya database, recording the book of delivery of all the Hospital. We have included data from January 2011 to December 2014, a total of 6248 cases. Age-adjusted rates of term, singleton, live-born spontaneous vaginal delivery, operative vaginal delivery, episiotomy, and anal sphincter laceration were calculated. And analyzed which variables increase or not the risk to require an episiotomy. For the analysis of qualitative variables, we have used Chi square with contingency tables. Regression analysis has been used to evaluate quantitative variables. The software used is SPSS 20.

Results

RESULTS: the rate of episiotomy with all vaginal deliveries decreased from 33,6% in 2009 to 22% in 2014. Sever laceration with vaginal delivery decreased from 3% in 2009 to 1.5 % in 2014. The risk of episiotomy and sever laceration are higher in operative vaginal delivery (OR 3.43 and 8.706, CI not including 1). The risk of episiotomy is higher with forceps than vacuum (OR 3.13, CI not including 1), but the risk of sever laceration does not increase. The newborn weight, the previous cesarean and gestational age do not affect the risk -in fact, an older maternal age is a protective factor- (OR 0.95).

Conclusion

Routine episiotomy is no longer used since liberal use has been discouraged. Anal sphincter laceration rates with spontaneous vaginal delivery has decreased, likely reflecting the decreased usage of episiotomy. The best instrument to protect perine is vacuum, and the worst is forceps.

Key words: Episiotomy, laceration, vaginal delivery, perinne.

Presenter name: Sandra Gómez Carballo

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THE USE OF POVIDONE-IODINE IN THE LABORING WOMAN AND WOLFF-CHAIKOFF EFFECT: WHAT RESPONSIBILITIES?

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Introduction

The Wolff-Chaikoff effect is (still) little known and discussed in Portugal. This syndrome's a type of transient congenital hypothyroidism that appears on newborns which mothers had contact to povidone-iodine.

The practice of disinfection with povidone-iodine, both for vaginal births vaginally as a cesarean deliveries in the abdomen is still a common practice in the vast majority of Portuguese delivery units. Partly for lack of information of health professionals, the other part so ingrained reluctance to change

Materials and Method

We proceeded to a literature review on the subject in focus, using the search descriptors "povidone-iodine" and "Wolff-Chaikoff" with Boolean operator AND, in the Cochrane Database of Systematic Reviews as well as in the "Discovery UP"system (of the University of Porto) which includes the following databases: Academic Search Complete, CINAHL, PubMed, SciELO, Scopus, UpToDate e Web of Science.

Were considered eligible all the articles available in full text, with the abstract in English, Spanish and Portuguese language; the electronic research took place in the month of November 2014.

Results

After application of the inclusion criteria, were selected 16 articles.

With regard to neonatal implications, the literature suggests that when mothers are submitted to vaginal disinfection with povidone-iodine during childbirth, the amount of iodine present in breast milk and urine (maternal and newborn) are quite high, restoring its physiological levels within seven days, and the TSH levels was considerably higher in preterm newborns who had contact to povidone-iodine; in these conditions the newborns that are breastfeed have a higher probability to develop this syndrome.

Conclusion

The use of povidone-iodine based sanitizers must be suspended and replaced by disinfectant chlorhexidine base; in the case of using the povidone-iodine, TSH and T4 levels must be closely monitored immediately after exposure to povidone iodine, especially in preterm infants whose skin permeability is higher and the thyroid gland more sensitive to the effects of excess iodine.

Each provider should undoubtedly seeking to inform and update on improving their own practice, to work daily on scientific foundations and basic theoretical support. The Nurse Midwives have a crucial role to be able to implement these practices in their quotidiane and also in transmitting information to their peers as sharing the knowledge in the team - in an informal way (conversation/debate) as in a more formal way to perform an action of in-service training for the multidisciplinary team.

Key words: povidone-iodine; childbirth; Wolff-Chaikoff effect; responsabilities; midwives.

Presenter name: Daniela Cunha de Vallêra Jacques Pedras

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Intrapartum infection and ST analysis of the fetal ECG - an observational study

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Introduction

Cardiotocography in combination with ST analsyis of the fetal ECG (STAN) is a tool for the detection of intrapartum hypoxia. Based on case reports, the clinical performance of STAN in case of intrapartum fetal infection has been questioned. We therefore studied the electrocardiographic performance of fetuses, diagnosed with a neonatal sepsis after delivery.

Materials and Method

Retrospective observational study on high-risk singleton pregnancies with a gestational age > 35+6 weeks and monitored by cardiotocography and ST-analysis (STAN). Study period: 2004-2008. Setting: University hospital. Study population: cases with neonatal sepsis. Reference population: remaining high-risk population monitored by STAN. Outcome measure: distribution and frequency of ST-events, neonatal outcome.

Results

Out of 23203 deliveries 6010 (26 %) were monitored with STAN. There were 41 cases of neonatal sepsis (0.18%), 28 of those (68%) had STAN monitoring. ST events occurred in 22 (79%) of the cases and 3075 (51%) of the reference population (p=0.004). There was a higher frequency of biphasic ST (21% vs. 7%, p=0.01) and episodic T/QRS rises (21% vs. 10%, p=0.047) in infected fetuses compared to the reference. The density of ST-events in total (1.12 vs. 0.58 event/h, p=0.1), and the density of specific types of ST-events (baseline rise: 0.57 vs. 0.36 event/h, p=0.09; episodic rise: 0.09 vs. 0.04 event/h, p=0.3; biphasic ST: 0.45 vs. 0.18 event/h, p=0.3) were not different between cases with and without neonatal sepsis. The risk of 5 min Apgar score <7 (OR 13.2, 95% CI), cord acidosis (OR 3.5, 95% CI 1.5-8.2), neonatal encephalopathy (OR 9.6, 95% CI 1.2-73.6) and perinatal mortality (OR 31.6, 95% CI 3.7-265.8) were all increased in cases with neonatal sepsis compared to the reference. When an intervention was indicated by STAN clinical guidelines the time interval between indication and delivery was not different between the cases and the reference population (30 vs. 26 min).

Conclusion

An intrapartum infection of the fetus affects the distributional pattern, but not the density of ST-events during labor. The severely increased neonatal morbidity and mortality may support a lower threshold of intervention in cases of clinically diagnosed chorioamnionitis.

Key words: ST analysis, neonatal sepsis, neonatal outcome, chorioamnionitis

Presenter name: J. Kessler

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METABOLIC SYNDROME AND STRUCTURE OF ITS COMPONENTS AT PREGNANT WOMEN WITH PRE-ECLAMPCIA AND OBESITY

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Introduction

Metabolic syndrome (MS) is still more actual problem of not only public health but also of obstetrical practice. it is because, that MS may leads to the developing of a number of obsteterical nad perinatal compicationsa and one of them is pre-eclampcia.

Materials and Method

To define frequency and structures of numbers of components of a metabolic syndrome (MC) at pregnant women with pre-eclampcia 120 pregnant women with alimentary obesity, admitted to the pregnancy pathology department of the republican specialized scientific practice medical center of obstetrics and gynecology were included to the study (main group). The body mass index of all pregnant women from main group was above 30 kg/m2. Control group was formed by 45 pregnant women without obesity. All pregnant women with obesity are divided into 3 groups depending on obesity degree: I group was consisted of 49 pregnant women with the first degree of obesity. 41 pregnant women with the second degree of obesity were included to the II group, and III group was formed by 30 pregnant women with the third degree of obesity. Inspection of pregnant women was spent under the accepted report. As criteria of revealing of components MS served: 1. Obesity – BMI is above 30 kg/m2; 2. Arterial hypertension – systolic blood pressure >140 mm.hg. And/or diastolic BP >90 mm.hg. (Mums 44); 3. Hyperdislipidemia - level in blood whey (Triglycerides - more than 2 mmol/l; general holesterine (GH) - more than 5 mmol/l; low density lipoproteins (LDLP) - more than 55 U/l; high density lipoproteins (HDLP) - below 1 mmol/l); 4. insulin resistance - an indicator of index Caro <0,33.

Results

All women who have admitted under observation, were surveyed for the purpose of revealing at them a metabolic syndrome. The analysis of data was spent depending on obesity degree. Characterising metabolic infringements, at pregnant women with obesity in comparison with control group statistical authentic differences in 3 group of pregnant women have shown the comparative analysis of all studied indicators. From literary data it is known, what exactly hyperinsulinemia is central link of metabolic syndrome X (Reaven G. M. 1988). In this connection it is necessary to notice, that at pregnant women with III degree of obesity indicator of insulin resistanse index considerably exceeds that in control group though does not exceed a standard indicator. From the received data it is necessary to conclude, that pregnant women with MS have statistically authentic increase of the general cholesterol, LDLP, trygliserids and decrease HDLP. Interesting data appear at the individual analysis. So, for example insulin resistancehas been revealed at 9 pregnant women with obesity of I degree (18,4%), at 12 (29,3 %) - with obesity 2nd degrees and at 70% of women with obesity of III degree. we have inetersted on frequency of metabolic syndrome at women with obesity. It has appeared, that frequency MS in group of women with I degree of obesity has made 85,7 %, воII to group of 95,1 % and in group with III degree of obesity-100 %. At the analysis following combinations of obesity arterial hypertension have revelealed at 18,4% of women with I oh obesity degree. At women with obesity of II degree - it was revealed at 7,3% and at women with obesity of III degree frequency of this combination was determined at 6,7% cases. Frequency of a combination of 3 components - obesity, an arterial hypertension, dyslipidemia in I group was diagnozed on 38,8%, in II group - 39 % and 29 % cases in III group. Full MC, i.e. Combination of all its four components - obesity, the arterial hypertension, dyslipidemia and insulin resistancеь has been revealed at 18,4 % of women in I group, 48,8 % of II group and 70 % at the III third group. Thus, at pregnant women with obesity diagnosis MS with revealing of components which are the cores causing anxiety has been established.

Conclusion

Thus, the frequency of MS at pregnant women with pre-eclamcia developed against of obesity makes by our data of 89,2%. The number of components of MS correlates with obesity degree and pre-eclamcia form. Full MS - combination of four its main components in 70% cases was found out in pregnant women with 3rd degree of obesity and severe pre-eclampcia, 48,8 % with 2nd degree of obesity and at 18,4% of pregnant women with 1st degree of obesity and mild pre-eclampcia. In this connection, more actual of question the comparative analysis of gestation, labor currency and a fetus condition at pregnant women

with pre-eclampcia against MS depending on number of its components for revealing of group of risk on developments of obstetrical and perinatal complications.

Key words: pre-eclampcia, obecity, metabolic syndrom

Presenter name: Kamola Abdullajanova

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Operative management of severe post-partum haemorrhage

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Introduction

Severe postpartum haemorrhage (PPH) is a major obstetric emergency. When medical management does not control the haemorrhage, surgical methods are employed.

Materials and Method

This study was a review of mothers delivering over a ten tear period in Malta's only tertiary hospital. Assessment of PPH rate and methods of arresting bleeding included operative interventions. The operative interventions included B-Lynch and peripartum hysterectomy as part of the management of PPH. Peripartum hysterectomy cases included were those performed after 20 weeks' gestation and delivery happening between 24 hours and 6 weeks postpartum.

Results

Over a ten year period 2004 to 2014, there were 39,320 deliveries with 29.9% were by caesarean section. 13 deliveries had to undergo a peri or postpartum hysterectomy, a rate of 0.3 per 1000 deliveries. 8 cases out of these 13 (61.53%) were related to emergency deliveries. The use of the b-Lynch was documented only once. The most common indication for peripartum hysterectomy was abnormal placentation, with placenta praevia and morbidly adherent placenta closely associated (53.85% of cases). 9 cases (69.23%) had a previous history of caesarean deliveries in previous pregnancies, a defining risk factor for abnormal placentation. Use of blood products was also studied for half of cases with a total of Red cells - 88 units, Fresh frozen plasma - 42 units, Platelets - 7 units and Cryoprecipitate - 12 units. Maternal morbidity noted in 5 cases (38.46%) including 2 cases of bladder injury, 1 case of ureteric injury, 2 cases of sepsis, and one case of pelvic haematoma. No maternal mortality reported.

Conclusion

The study confirms peripartum hysterectomy is a rare event but with possible serious complications. Senior members of the obstetric and the anaesthetic team should be involved early on in the management. All obstetricians should be diligent and be aware of potential risk factors that might require this operative procedure as a last resort to control post-partum haemorrhage.

Key words: Abnormal placentation; obstetric haemorrhage; peripartum hysterectomy

Presenter name: Daliso Chetcuti

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ACUTE APPENDICITIS IN THIRD TRIMESTER PREGNANCY – THE IMPORTANCE OF AN EARLY DIAGNOSIS AND IMMEDIATE ACTION.

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Introduction

Appendicitis is the most common cause of non obstetric emergency surgery in the pregnant woman, and is more frequent during the 2nd trimester. The overall incidence is not increased in pregnancy, but the severity is generally higher due to late diagnosis. This case report has the objective of highlighting the importance of an early diagnosis and immediate action in a case of appendicitis in 3rd trimester pregnancy.

Materials and Method

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Results

A 38 years old, black, multiparous woman, who is 34 weeks pregnant, arrives to the emergency room (ER) with a 24 hour evolution abdominal pain in the upper quadrants (associated with anorexia, nausea and diarrhea). Category I tocodynamometer and clinical analysis were normal, except for a slightly elevated C-Reactive Protein (CRP). The woman was addmited for fetal and maternal surveillance, and discharged after 24 hours due to improvement in the clinical profile. 48 hours later she returns to the ER with painful contractions associated with fetal bradycardia. Again readmitted with aggravation of the abdominal pain, now located at the right flanc and right iliac fossa, positive Blumberg sign and 10 times elevated CRP. After a multidisciplinary discussion with the emergency team, the patient is subjected to laparotomy for suspected acute appendicitis. In the immediate postoperative period a category III tocodynamometer culminated in an emergent cesarean section, where was observed the presence of a true knot cord. The outcome was favorable for the mother and child. The histological results revealed gangrenous appendicitis with periappendicitis.

Conclusion

Acute appendicitis in pregnancy, especially in 3rd trimester, is a complicated diagnosis by the atypical clinical signs and misleading laboratory tests, requiring a high level of clinical suspicion in order to prevent maternal-fetal morbidity and mortality. This case report underline the importance of sharing knowledge based on experience to better diagnose this clinical entity and improve clinical outcomes.

Key words: pregnancy, acute appendicitis, cesarean section.

Presenter name: Sara Coelho

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FETAL MACROSSOMIA – MATERNAL AND FETAL OUTCOMES GIVEN A TRIAL OF LABOR

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Introduction

Delivery of high birthweight infants is associated with adverse maternal and fetal outcomes. Maternal diabetes is an important risk factor for fetal overgrowth. Available evidence indicates that we cannot accurately identify macrossomic infants prior to birth or accurately predict or prevent adverse outcomes in this setting.

Materials and Method

We retrospectively characterized 337 deliveries with birthweight ≥4000 g, from a total of 7112 births (2012-2014). We selected women who underwent a trial of labor and analyzed delivery route and maternal-fetal outcome.

Results

Macrossomia had a prevalence of 4,7% (95% CI 4,3-5,3%). The last estimate of fetal weight in the 3rd trimester was ≥ 90th percentile in only 18,5%. The cesarean delivery rate was significantly higher than our global rate (44,5% vs 29,2%; OR=1,94, 95% CI 1,56-2,43).

Of the 150 c-sections performed, 45,3% were scheduled, with only 17,6% due to suspected macrossomia. Hence, 269 (79,8%) women with macrossomic fetuses underwent a trial of labor, 30,5% of whom had a c-section, 47,9% a normal vaginal delivery and 21,6% an operative vaginal delivery. The most common indication for c-section was arrested labor (81,7%). Latent fase arrest or failed induction occurred in 64,9%, active fase arrest in 22,8% and second stage arrest in 12,3%. An operative vaginal delivery was attempted in 6 out of 7 cases of second stage arrest.

Of the187 infants delivered vaginaly, shoulder dystocia developed in 23,5% (95% CI 18,0-30,1%). Third degree perineal tears occurred in 3,7% (95% CI 1,8-7,5%), without 4th degree lacerations reported.

Uterine atony occurred in 3,3% of cases (95% CI 1,8-6,2). Fetal neuromusculoskeletal injury was reported in 3,7% (95% CI 2,0-6,7%). There was a single case of Apgar <7 at 5 minutes. No cases of uterine rupture, perinatal mortality or hypoxic isquemic encephalopathy attributable to birth asphyxia were described.

Of the 24 women with previous or gestational diabetes who gave birth to macrossomic infants during this 3 year period, 9 had elective c-sections (6 for suspected macrossomia) and 15 underwent a trial of labor, with 1 shoulder dystocia and no perinatal injuries.

Conclusion

The cesarean delivery rate was significantly higher in macrossomic infants.

A trial of labor was allowed in the majority of women who ultimately delivered macrossomic infants, with acceptable neonatal and maternal outcomes.

Since we cannot accurately identify macrossomic fetuses prior to delivery or predict serious morbidity, routine cesarean delivery for all cases of suspected macrosomia is not appropriate.

Key words: MACROSSOMIA, TRIAL OF LABOR

Presenter name: S. Saramago

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SHOULDER DYSTOCIA IN MACROSSOMIC INFANTS – INCIDENCE, RISK FACTORS AND OUTCOME

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Introduction

High birthweight is a major risk factor for shoulder dystocia. We retrospectively studied macrossomic infants delivered in our institution, during a 3 year period, and tried to identify the incidence, risk factors and outcome of shoulder dystocia.

Materials and Method

From a total of 7112 births from Jan-2012 to Dec-2014, were retrieved 337 infants with birthweight ≥4000 g. The medical records of both mother and neonate were reviewed. We selected the neonates delivered vaginaly and analysed the incidence of shoulder dystocia and resulting morbidity and mortality. We also tested if the following factors were predictive of shoulder dystocia in our population of macrossomic infants: maternal age >35 years, gestational diabetes, previous cesarean section, induced labor, operative vaginal delivery and vacuum delivery.

Results

Macrossomia had a prevalence of 4,7% (95% CI 4,3-5,3%). The last ultrasound estimate of fetal weight in the 3rd trimester was ≥ 90th percentile for gestational age in only 18,5% of cases. The cesarean delivery rate was significantly higher than our global c-section rate (44,5% vs 29,2%; OR=1,94, 95% CI 1,56-2,43). Of the 187 infants delivered vaginaly, shoulder dystocia was reported in 44 cases (23,5%; 95% CI 18,0-30,1%). There were no cases of perinatal death, neonatal hypoxic isquemic encephalopathy or Apgar<7 at 5 minutes. There were 7 cases significant fetal neuromusculoskeletal injury (15,9%; 95% CI 7,9-29,4%) – 3 clavicle fractures, 1 humeral fracture and 3 brachial plexus palsies. The incidence of 3rd degree perineal tears was 4,5% (95% CI 1,2-15,1%) among births complicated by shoulder dystocia. Uterine atony occurred in 4,5% (95% CI CI 1,2-15,1%). Uterine rupture or 4th degree tears were not recorded. The risk of shoulder dystocia wasn't significantly increased by none of the tested variables.

Conclusion

The cesarean delivery rate was significantly increased in this population. The incidence of shoulder dystocia, among vaginaly delivered macrossomic infants, was higher than generally stated in literature, which may be due to its appropriate documentation. Among births complicated by shoulder dystocia, there were no cases of perinatal asphyxia or death but we found a significant number of fetal neuromusculoskeletal injuries. None of the variables tested was a predictor for shoulder dystocia among macrossomic infants but perhaps the size of the sample was insufficient to detect small differences.

Our work reaffirms that most cases of shoulder dystocia cannot be prevented because they cannot be predicted, given the low predictive value of ultrasound estimates for fetal weight at term and the unpredictability of which macrossomic infants will ultimately develop shoulder dystocia.

Key words: MACROSSOMIA, SHOULDER DYSTOCIA

Presenter name: S. Saramago

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Pseudoxanthoma elasticum and pregnancy – Intrapartum care

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Introduction

Pseudoxanthoma elasticum (PXE) is a genetic systemic disorder that affects the elastic tissue of the skin, the eye, and the cardiovascular and gastrointestinal systems. The first literature published on pregnancy in PXE contained reports of severe complications, and some healthcare providers advise women with PXE against becoming pregnant. More recent studies have demonstrated that PXE is not associated with markedly increased fetal loss or adverse reproductive outcomes and that haemorrhagic complications are much lower than previously reported. Clinicians now discuss the consequences of labour and delivery on ocular lesions and therefore if PXE should be an indication for cesarean section. The type of analgesia and anesthesia for labor and delivery in PXE is also under discussion.

Materials and Method

A review of the published literature was conducted. We also present our experience in the management of pregnancy, labor and delivery of a woman with pseudoxanthoma elasticum.

Results

Caucasian, 36 years old. She was diagnosed with pseudoxanthoma elasticum (PXE) at the age of 7, with regular follow-up since 18. Diagnosed with primary infertility by the age of 30, she had her first post-ICSI pregnancy at 34. This pregnancy ended at 23 weeks with a septical abortion, complicated by bilateral pneumonia and acute pulmonary edema in ICU. The fetus had normal karyotype and the anatomopatologic exam showed chorioamnionitis. Her second pregnancy was a twin BC/BA pregnancy post-ICSI. It ended as a spontaneous abortion at 19 weeks, complicated by bilateral pneumonia. Both fetuses had normal karyotypes. The diagnose of cervical incompetence was made.

The third pregnancy was spontaneous. Cardiac evaluation through echocardiogram and electrocardiogram showed a normally functioning heart. Ophthalmologic evaluation showed exuberant angioid streaks. At 17 weeks a cerclage was performed. She was vaccinated against repiratory infections. Her follow up included frequent blood analysis to test inflammatory markers. At 33 weeks she experienced preterm premature rupture of membranes and the cerclage was removed. She then entered spontaneous labor and epidural anesthesia was given. Considering the gestacional age, a forceps was used to abreviate the second stage of labor. The newborn weighted 2250g. The Apgar scores were 8, 8 and 10 at 1, 5 and 10 min, respectively.

Conclusion

According to the literature reviewed, PXE is not associated with markedly increased fetal loss or adverse reproductive outcomes, so there is no basis for advising women against pregnancy. Retinal examination during pregnancy and prompt attention to any visual symptoms are advised. Shortening of the second stage of labor through instrumental delivery might be advised to prevent retinal bleeding secondary to heavy straining. If severe angioid streaks are present it might be an indication for cesarean section. These women should be seen in an anesthetic consultation early in pregnancy.

Key words: Pseudoxanthoma elasticum, PXE, pregnancy
Presenter name: M. Boia

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IS USE OF A FOLEY CATHETER FOR CERVICAL RIPENING IN AN OUTPATIENT SETTING SAFE?

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Introduction

The amount of labour inductions on request has increased in the past years. Presently, in many obstetric departments all women requiring cervical ripening remain in hospital during the preinduction procedure. Home-stay during the procedure, if safe, may help create optimal comfort for the mothers-to-be prior to the life event of delivery and is believed to reduce health care costs. In a retrospective cohort study, adverse outcomes and extra medical attention in hospital setting were surveyed among women with low-risk pregnancies during cervical ripening by a Foley catheter to consider the use in an outpatient setting.

Materials and Method

From September 2012 to September 2014 all women with an unfavourable cervix (Bishop score ≤ 5) and intact membranes who underwent cervical ripening by a Foley catheter were identified. Serious adverse outcomes were caesarean sections due to non-reassuring cardiotocography, abnormal vaginal bleeding, abruptio placenta or stillbirths during cervical ripening with the Foley balloon. Secondary outcomes included discomfort that required extra medical attention during cervical ripening by the Foley catheter, such as painful contractions, abnormal blood- or fluid loss, reduced foetal movement and / or painful pressure sensations. A multivariate analysis was performed to identify patient features associated with receiving extra medical attention during admission.

Results

Among 478 women who received a Foley catheter, 338 met the criteria for analysis. No serious adverse outcomes were recorded. A return rate of 49 women (14.5%) was observed as a result of observed cardiotocography monitoring, vaginal examination or sedation requests during admission. Reasons for medical attention included painful contractions in 14 women (4.1%), abnormal vaginal blood loss in 10 (3.0%) women, fluid loss in 9 (2.7%) women, reduced foetal movement in 14 (4.1%) women and/or a pressure sensation of the balloon in 3 (0.9%) women. A multivariate analysis indicated that a BMI of 25.0 – 29.9 was significantly associated with extra medical attention during cervical ripening (adjusted OR 2.17; 95% CI 1.05-4.43). Other patient characteristics (age, parity, indication for induction) showed no significant differences for secondary outcomes.

Conclusion

In a low-risk population, the Foley catheter appears to be a safe method of cervical ripening with no risk of serious adverse outcomes. In addition, cervical ripening causes minimal discomfort, requiring extra medical attention in a few cases (14.5%). Hence, the findings of this study justify the use of Foley catheters in an outpatient setting for women with low-risk pregnancies.

Key words: preinduction, cervical ripening, safety, Foley catheter, outpatient setting
Presenter name: Claudia Savelkoul

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ACUTE FATTY LIVER OF PREGNANCY - DIAGNOSTIC CHALLENGE

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Introduction

Abnormal liver tests, that occur in 3-5% of pregnancies, are mostly due to liver diseases unique to pregnancy. Acute fatty liver of pregnancy (AFLP) is one uncommon cause of pathological hepatic dysfunction, however it has always to be considered due to its potential for acute liver failure, and consequent foetal and maternal morbidity and mortality. There are still many doubts regarding this condition, and the relationship between AFLP, HELLP syndrome, and pre-eclampsia has not been clearly established. In addition, the initial clinical presentation may be nonspecific, leading to a difficult diagnose and differential diagnosis between these entities.

Materials and Method

Case report of a woman with AFLP complicated by multiple organ dysfunction requiring intensive care in spite of early diagnosis and prompt termination of pregnancy.

Results

34-year-old female at 34-week gestation, G2P1, was admitted to the hospital presenting malaise, epigastric pain, nausea and vomiting, leg oedema and diplopy. Physical examination revealed a somnolent but arousable, normotensive, apyretic and icteric woman, with a non-tender abdomen. Laboratorial evaluation showed elevated white blood cells, significant prolongation of prothrombin and thromboplastic times, low fibrinogen levels, high d-dimers, and altered hepatic and renal biochemistry. She presented normal platelets and glucose levels, and no signs of haemolysis. Ultrasound showed only hepatic steatosis. Considering the clinical presentation and the complementary evaluation we thought it was more likely to correspond to an acute fatty liver of pregnancy even without the hypoglycaemia, once this was the only element that did not adequate. After administration of fresh frozen plasma, coagulation studies improved, and, due to a non-tranquilizer foetal state and the maternal pathology, a caesarean-section was decided. Surgery underwent with no complications and no major difficulties with the haemostasis. A few hours after, she had a hypotensive event associated to acute anaemia and oliguria due to a moderate to extensive haemoperitoneum. Because of her coagulopathy and once the haemoglobin and clinical state stabilised, after administration of fresh frozen plasma and packed red blood cells, we opted for an expectant attitude in the ICU. Three days after, she had a general deterioration with encephalopathy, aggravating laboratory studies, associated to haematemesis and anuria, being transferred to a facility with gastroenterology ICU where she was submitted to an exploratory laparotomy with haemostasis review and drainage. She stayed for a week in ICU requiring maximal supportive management with mechanical ventilation because of coma and parenteral nutrition because of associated acute pancreatitis. After stabilised she was transferred to our hospital where she was evaluated by general surgery, neurology, and haemotology. She was dismissed one month after her first visit to the ER.

Conclusion

AFLP is a rare, life-threatening complication with variable presentation. In one hand, a clear diagnosis and the differentiation between this and other entities is difficult and can cause delays in management; on the other hand, while the natural history of the disease is improvement within 24–48 hours of delivery, we were unable to prevent her deterioration with serious complications, such as fulminant hepatic failure, worsening coagulopathy and pancreatitis. Therefore, it is recommended that these patients have an easy access to be managed in the ICU.

Key words: acute fatty liver of pregnancy, hepatic abnormalities

Presenter name: Ana Cláudia Santos

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Planned home birth: critical appraisal of the available evidence

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Introduction

The society and professional support for midwife-supervised planned home birth has been growing in the last few years most developed countries. There is an increasing number of media coverage and scientific articles advocating planned home birth as being advantageous compared to hospital birth.

Materials and Method

We conduct a review of the literature addressing patient safety, patient satisfaction, cost-effectiveness and ethical concerns of planned home birth or midwife-only community clinics compared to hospital delivery.

Results

In terms of patient safety, planned home birth has an increased risk of neurological dysfunction, partum-related perinatal death, intrapartum death compared to hospital delivery. Moreover, the hospital transfer rates are high in most studies, especially in nulliparous women, an event shown to have a profound effect in patient satisfaction. Cost-effectiveness studies do not take into account the higher cost of delivery of these women transported during labour or the indirect lifetime costs of disabled children. Finally, regarding ethical issues, the care providers should take into account that their obligations are not solely to the pregnant woman, but also to the foetal and the neonatal patient effectively limiting the right of the pregnant woman to consider the planned home birth.

Conclusion

Our analysis shows hospital-based birth as safer, more cost-effective and ethically reasonable alternative of birth. Obstetric healthcare providers should not support home planned birth and advocate against it while queried by pregnant patients.

Key words: cost-effectiveness, ethics, patient safety, patient satisfaction, planned home birth
Presenter name: D. Bruno

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BIRTH ASPHYXIA IN PRETERM NEONATES BORN AFTER IN VITRO FERTILISATION

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Introduction

The objective of this study is to assess the incidence of IVF preterm infants with the gestational age below 36 weeks and 6 days and the presence of birth asphyxia in this group.

Materials and Method

The retrospective study which analysed infants born after IVF with the gestational age below 36 weeks and 6 days in the Neonatology Clinic - Obstetrics - Gynecology Department - "Prof. Dr. Alfred Rusescu" Institute for Mother and Child Care between the 1st of January 2014 and the 31st of December 2014. The following were monitored: the infants' gestational age, weight, delivery mode, need for resuscitation , blood gas analyse.

Results

Between the 1st of January 2014 and the 31st of December 2014, the Obstetrics-Gynaecology Department of "Prof. Dr. Alfred Rusescu" Institute for Mother and Child Care recoded a increased incidence of prematures born after IVF . Birth asphyxia occurred in most of these infants . A significant percentage of infants with GA<32w born after IVF required extensive resuscitation.

Conclusion

Below 32 weeks of gestation there are no differences between IVF preterm neonates and those concepted spontaneously

Key words: birth asphyxia, prematurity, IVF,resuscitation
Presenter name: Silvia Maria Stoicescu

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Placenta Previa Succenturiata – a case report

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Introduction

Placenta previa is characterized by the total or partial implantion of the placenta in the uterine lower segment, which occurs in about 0.5% of pregnancies. It is associated with an increased risk of antepartum haemorrhage, placental accretion and postpartum hemorrhage. Placenta succenturiata consists of a placenta connected to an additional lobe by an artery and a vein. Its major complication is the retention of the additional lobe after the delivery of placenta, with the consequent infectious risk and postpartum hemorrhage.

Materials and Method

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Results

The authors describe the case of a pregnant woman with a placenta previa succenturiata.
39 years old, referred to the Obstetrics consultation because of gestational diabetes, diagnosed at 15 weeks of gestation. Gesta 3 Para 2, with 2 previous eutocic deliveries. Third trimester ultrasound showed a marginal placenta previa. At 34 weeks of pregnancy it was performed an obstetric ultrasound for assessment of fetal well-being and a marginal placenta previa sucenturiada was visualized, lying 11.8 mm of the internal cervical os (OCI). The pregnant was told to rest and have sexual abstinence and an elective cesarean section was scheduled at 38 weeks of gestation. The pregnancy developed without complications, namely vaginal hematic loss.

Conclusion

The diagnosis of placenta previa and placenta succenturiata is done by transvaginal ultrasound performed on the 3rd trimester of pregnancy. Rest and sexual abstinence are recommended after diagnosis. In cases like the one described, elective cesarean section between 36 and 38 weeks of gestation is indicated, if the clinical condition is stable.

Key words: Placenta Previa
Presenter name: Carlos-Alves M

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Birth center as a resource to increase the rate of normal births: why not in Portugal?

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Introduction

The "midwifery-led care units" are places of birth where midwives work in partnership with women, where their needs are heard and respected. There are two types of midwifery-led units: freestanding or alongside units (midwifery led units on a hospital site with an obstetric unit). These are places that assist normal and low-risk pregnancies with low intervention that women look for; these units are available in several European countries such as the UK and the Nordic countries. The creation of childbirth care units with low intervention assistance for low-risk pregnant women - birth centers - gathers itself the potential to meet the needs experienced by Portuguese women, respecting the quality and safety premises in care. This communication will address topics such as: characterization of these units, benefits, safety and implementing proposals. Aware that a long road still lies ahead, we intend to demonstrate the advantages for creating this type of unit, as well as proposing the creation of projects that make their implementation possible at the medium term, in the national context. Small steps to make long paths. The Portuguese obstetric community is able to project a future with more health and satisfaction. This is a great opportunity to discuss and share experiences in this field, opening the horizon to a future of network participation, partnerships and national and international working groups.

Materials and Method

We proceeded to the systematization of the general outcomes of birth centers care provided by midwives, through a review of the most recent scientific articles about the subject. We used the search descriptors “birth center”, “midwifery”, “maternal outcomes” and “neonatal outcomes” with Boolean operator AND, in the “Discovery UP” system (of the University of Porto) which includes the following databases: Academic Search Complete, CINAHL, PubMed, SciELO, Scopus, UpToDate e Web of Science); in the Cochrane Database of Systematic Reviews we used “midwifery” and “models” as descriptors.

Were considered eligible all the articles available in full text, produced in the last five years (from 2010), in portuguese, english or spanish language; the electronic research took place in the months of December 2014 and January 2015.

Results

Summary results

After application of the inclusion criteria, were selected 15 articles.

From the literature review it’s concluded that in the context of the promotion of normal birth and involvement of women in their healthy pregnancy processes, birth centers provide assistance that:

- is safe
- promotes the best results from maternal and newborn health (mortality and morbidity)
- meets the expectations of the user
- reflects the soundness and appropriateness of the human and technical resources
- is based on proven evidence in international contexts
- reflects the best cost-benefit

Conclusion

The principal aim of each health care organization should be to achieve the best quality and safety. Health care providers must reduce random variations and improve activities by a standardized process whose results can be measured in terms of women outcome; newborn and infants are one of the weakest population group - to improve their health outcome is thus mandatory to do all efforts to obtain a safe, effective, efficient and women centred care.

Portugal has scientific, human, technical and strategic resources that allows excellent outcomes for women and her babies. We believe that our country can change and improve maternal and neonatal outcomes and satisfaction; we are certain that the creation of alongside midwifery units is a very good option at short time for our decision makers: comparing portuguese reality with the international evidence such projects will certainly be a success.

Key words: birth centers; neonatal outcomes; maternal outcomes; midwifery; model of care.

Presenter name: S. Rodrigues

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Cervical Reversal: Plotting When a Cervix Closes Down

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Introduction

Cervical reversal, the closing down of a cervix when dilation appears to regress from an earlier vaginal exam, has been observed in midwifery practice but has not to our knowledge been described in the medical literature. Better understanding of its etiology might help to reduce the fear that a reversal is irreversible and reduce unnecessary cesareans.

Materials and Method

We collected data on 9,000 births from midwives practising in Canada and the United States. We included questions about cervical reversal occurrence, the dilation at which it occurred, and how many centimetres it closed down. We anlaysed its prevalence by primip and multip and whether transports to hospital affect its timing.

Results

Among 9,000 births 234 cervical reversals were reported (2.6% of births). Reversals were reported by 107 midwives and were more common among primips. Cervical reversals occurred most frequently between 6 and 10 centimetres and averaged 1 to 2 cm reduction in dilation.

Conclusion

Cervical reversal exists and this is the first research to identify and track the occurrence. There is some indication that events, such as transport to hospital from a home birth, may provoke a cervix to regress.

Key words: Cervical Reversal

Presenter name: Betty-Anne Daviss & Ken Johnson

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INTEROBSERVER AGREEMENT OF INTRAPARTUM CARDIOTOCOGRAPHY CAN WE TRAIN ON SIMULATORS TO IMPROVE IT?

Abreu-dos-Santos, F, Silva, P., Câmara, S., Reis, F., Pestana, C., Pinto, P., Barros, C., Pereira, H.
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Introduction

Nowadays, cardiotocography (CTG) remains as the most prevalent method of intrapartum fetal surveillance, often supported by the ST-analysis. The weakness of intrapartum CTG lies in a generally poor standard of interpretation and the contribution of the human factor, demonstrated by high intra- and inter-observer variability. Several studies show evidence that training programmes can improve CTG-knowledge, interobserver agreement and quality of care.

Our study pretends to evaluate interpretation of intrapartum CTG between different observers and see if it influences the outcome (time and type of delivery).

Materials and Method

We reviewed all the clinical files, in our Hospital, of deliveries by cesarean section (CS) for the last four months of 2014, coded as not reassuring CTG. We excluded those who were not in active labor, multiple pregnancies and those who used ST-analysis.

Four Obstetricians (two residents, 4th and 6th years, and two junior assistants) interpreted the last hour of CTG readings of 30 parturients, without knowing their clinical outcome or the objective of the study. They only had access to the number of prior pregnancies, if there was a previous CS and cervix dilatation. Agreement and reliability were evaluated for the detection of fetal baseline heart rate (FHR), long-term variability (LTV), accelerations and decelerations, using proportions of agreement (PA) and Kappa statistic (K), with 95% confidence intervals (95% CI). We also required the observers to classify the CTG as normal, intermediate or pathologic pattern and their behavior in each situation (expectant; oxytocin infusion; prompt delivery: vaginal ou CS).

Results

Overall we obtained a good agreement relatively to FHR and LTV, a moderated agreement on accelerations and decelerations. Regarding the classification parameter we found to have a good agreement. When we looked for CS rate, from the 30 readings: observer A decided CS in 13, observer B in 5, Observer C in 6 and observer D in 2.

Conclusion

Given that this is a small sample we cannot extrapolate the results, however we feel that different interpretations lead to an overall different outcome (time and delivery type) and this is in agreement with the literature which describes that continuous intrapartum CTG can lead us to increased rates of CS.

The authors believe that, as with so many other procedures (basic life support, advanced life support, etc.), our CTG reading would improve if we were encouraged to refresh our knowledge every 2 to 3 years, through simulation programmes. Further studies will be done to reassess the interobserver variability in our Hospital, after submitting the observers to training in simulators.

Key words: INTRAPARTUM CARDIOTOCOGRAPHY
Presenter name: Abreu-dos-Santos, F

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EFFECTS OF PRENATAL PERINEAL MASSAGE AND KEGEL EXERCISES ON THE INTEGRITY OF POSTNATAL PERINE

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Introduction

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Materials and Method

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Results

This randomize controlled experimental study has been carried out to investigate the effects of perinea massage and Kegel exercises applied prenatally to women who experienced vaginal delivery on the prenatal perineal trauma and postnatal perinea pain and its improvement. Research was carried out between 1 January 2012 and 1 January 2013, with a total of 101 pregnant women (30 massage, 32 exercise and 39 control group) who referred to Pregnancy Polyclinic of Department of Gynecology and Delivery, Ege University Hospital, who had no risky pregnancy or any indication of predetermined cesarean section, whose gestation period was over 33 weeks and who accepted to participate in research. As a data collection tool, Data Collection Form, Kegel Exercise Training Brochure, Practice Observation Form and Prenatal Perinea Massage Learning Guide for Implementer were used. After all necessary permissions obtained, researcher informed the message group related to the importance of massage and then performed perinea massage over perineal region. Researcher continued to perform this massage once a week until delivery. Kegel exercises were taught to pregnant women in exercise group one to one and they were asked to perform exercises at home at least 5 – 10 times daily and also to register them until delivery. When exercise group came to weekly controls or when they were contacted at home they were asked if they have performed daily exercise or not. The pregnant women in control group did not receive perineal massage, Kegel exercise or any other application. To determine postnatal effects of massage and exercise, one to one interview was performed during delivery and postnatal 24 hours at the hospital and a telephone interview was performed 15 days postnatal, so three groups were evaluated. During analysis of data, number, percentage, chi-square, Mann Whitney U test and Kruskal Wallis test were used. A statistically significant different was found between study and control groups in terms of episiotomy application status, occurrence of laceration, degree of laceration, postnatal 24 hours and 15 days perineal pain and the mean scores of REEDA scale. According to the results of research, it was found that prenatal perineal massage and Kegel exercises have caused reduction in the use of episiotomy and in perineal trauma and also affected perinatal pain and its improvement significantly. In line with these findings, the prenatal perineal massage and Kegel exercise reduce prenatal perineal laceration and episiotomy rates; thus accelerate improvement during postnatal period. Therefore, it is thought that when the perineal massage and Kegel exercise being performed during pregnancy is supported by health professional, it will play a significant role in increasing women's quality of life both during delivery and postnatal period.

Conclusion

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Key words: Perineal massage, kegel exercise and iintegrity of perineal

Presenter name: Sevgul DONMEZ

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