

Results

The outbreak of OXA-48-producing *K.pneumoniae* was detected between 10/19/2013 and 11/4/2013 in three patients admitted to general and digestive surgery unit, who coincided in time and space. Thus, infection surveillance, control and educational programs for healthcare workers, were conducted by the Infection Control Team. Active screening culture of rectal swabs was performed in all hospitalized patients at affected units. Patients colonized or infected were placed on contact precautions followed by chlorhexidine bathing.

Until 5/30/2014, 63 cases were reported: 23 (36%) in clinical sample (only or with a rectal swab) and 40 (64%) in rectal swabs. Out of the clinical samples, 15 (65%) were classified as nosocomial infections, 4 (17.5%) nosocomial colonizations and 4 (17.5%) extra-hospital infections (2 UTI and 2 bacteriemia). Evolution of the incident cases is described in Table 1.

| Table 1. | | |
|---------------|---------------------|-----------------|
| Months | N° clinical samples | N° rectal swabs |
| October 2013 | 1 | 0 |
| November 2013 | 4 | 6 |
| December 2013 | 4 | 10 |
| January 2014 | 5 | 5 |
| February 2014 | 5 | 6 |
| March 2014 | 2 | 4 |
| April 2014 | 2 | 4 |
| May 2014 | 0 | 5 |

All of OXA-48-producing *K.pneumoniae* were CTXM-15 producers. Pulsed-field gel electrophoresis identified one main clone type.

Discussion

This study showed a diminution of OXA-48-producing *K.pneumoniae* in clinical samples versus surveillance cultures. Our findings highlight the importance to implement prevention and infection control measures.

Abstract ID: 2972

Implementing surveillance of Surgical Site Infections in C-sections performed in an Acute Trust

Ryan George, Julie Cawthorne, Louise O'Connor
Central Manchester University Hospitals NHS Foundation Trust

Introduction

Saint Mary's Hospital is a large tertiary referral centre serving the population of Central Manchester and patients with complex medical conditions referred from across the North West. As part of a service improvement exercise, the Infection Prevention & Control and Tissue Viability (IPC/TV) team conducted a programme of enhanced surveillance of Surgical Site Infections (SSI) following C-section deliveries with a view to incorporation into on-going SSI surveillance.

Aim

To determine a baseline rate for C-section SSI/identify associated risk factors in the population studied.

Method

With advice from the Surgical Site Infection Surveillance Service (SSISS) at Public Health England (PHE), data collection sheets, patient information and discharge

letters/questionnaires were devised. Over a three month period, all elective and emergency C-sections were identified via theatre booking systems and surveillance forms were completed for each procedure on daily basis. A 30-day follow-up phone call was made to determine if there were any issues with wound healing, and criteria set forth by SSI surveillance were used to determine if the healing issues were true SSI.

Results

Of the 478 ladies who underwent delivery by C-section during the period of observation, follow-up data was obtained for 284 (59%). Using patient reported SSI classification criteria set forth by SSI surveillance, 71 ladies contacted were deemed to have experienced a SSI, representing 15% of the cohort studied.

Discussion

A baseline level of patient-reported C-section SSI has been established. Issues around data collection methodology and ownership were experienced and subsequently resolved. Whilst SSI surveillance following C-sections is mandatory in the rest of the UK, this is not the case in England. This study identified that useful data can be obtained once clear guidelines and protocols have been established. In addition to improving service provision and patient experience, significant financial savings can be made due to reduced readmissions and treatment costs.

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Prognostic indexes, length of stay and nosocomial infection in Intensive Care Unit: analysis of 835 cases From Brazil

Lilia De Souza Nogueira, Renata Eloah De Lucena Ferretti-Rebustini, Vanessa De Brito Poveda, Rita De Cassia Gengo E Silva, Ricardo Luis Barbosa, Kátia Grillo Padilha
University of São Paulo, Brazil

Introduction

Studies describing the occurrence of Infection Related to Health Assistance (IRHA) in the ICU and its relation to some selected predictive factors are lacking. We aimed to analyze the occurrence of IRHA in ICU, according to severity, length of stay (LOS) and nursing work load.

Methods

Cross-sectional study was done in 9 heterogeneous ICUs (clinical and surgical) belonging to a public hospital in São Paulo, Brazil, during 3 months. Data was collected from medical records of patients. Age, gender, LOS, occurrence of infection, number of infections per patient, admission criteria (clinical or surgical), prognostic indexes (SAPS II, Charlson, LODS) and the Nursing Activities Score (NAS) were analyzed. Non-parametric tests were used for the analysis and the Logistic Regression selected to enter the model all the variables whose p-value was ≥ 0.20 . Data was considered significant when $p \leq 0.05$.

Results

Sample was composed by 835 cases, mostly males (57.5%) with mean age of 54.26 ± 17.29 . IRHA was present in 12.5% of the cases (ranging from 1 to 8 events/patient). Among subgroup of IRHA patients, the occurrence of infection was more prevalent among male (8.4%; $p < 0.030$), admitted for clinical treatment (8.1%; $p < 0.004$), with a mean LOS of 6.98 days ($p < 0.000$). The number of infectious event was correlated to the LOS ($r_s = 0.403$, $p < 0.000$), burden of disease measured by Charlson ($r_s = 0.075$; $p < 0.030$), severity measured by SAPS2 ($r_s = 0.182$; $p < 0.000$) and by LODS ($r_s = 0.128$; $p < 0.000$). Age and NAS was not correlated to IRHA. By logistic regression, it was observed that LOS and SAPS 2 prognostic score were independent related to the occurrence of IRHA.

Discussion

The increase in the LOS and the severity of the disease are associated to the risk of infection in ICU patients, despite the type of ICU or admission criteria.