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**PERIODONTITIS AND SALIVARY CYTOKINES OF OBESE PREGNANT WOMEN AND THEIR RELATIONSHIP WITH THE INFANTS' WEIGHT AT BIRTH**GERSON APARECIDO FORATORI-JUNIOR; THIAGO JOSÉ DIONÍSIO; VÍCTOR MOSQUIM; SILVIA HELENA DE CARVALHO SALES-PERES  
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**Aim:** This study evaluated the periodontal condition and the levels of salivary inflammatory mediators in obese and eutrophic women in the 3rd trimester of pregnancy (T1) and after delivery (T2), and the relationship of these factors with the infants' weight at birth.

**Method:** Fifty pregnant women were divided into: with obesity (GO = 25) and eutrophic (GE = 25) and were evaluated regarding: I- periodontal status; II- salivary levels of TNF- $\alpha$ , leptin and IL-1 $\beta$  by Luminex® assay; and III- infants' weight at birth, which was classified as insufficient (<3 kg) and normal (3 - 3.999 kg). Mann-Whitney, Friedman, ANOVA; chi-square and Cochran's Q test were adopted (p < 0.05).

**Results:** GO showed a higher prevalence of sites with bleeding on probing during T1, while GE showed a worsening in this condition after delivery (p = 0.002). Obese patients had a higher prevalence of periodontitis in both periods (p < 0.001). In addition, they had a higher level of TNF- $\alpha$  (p = 0.003) and IL-1 $\beta$  (p = 0.009) in saliva at T1, with a reduction in IL-1 $\beta$  after delivery. Both groups showed a reduction in salivary leptin levels between periods (p < 0.001). Obese women had children with lower birth weight (p = 0.022), with 40% of them being classified as low/insufficient weight at birth (p = 0.025).

**Conclusion:** It is concluded that women with obesity had worse periodontal parameters during pregnancy and after delivery, having high salivary levels of TNF- $\alpha$  and IL-1 $\beta$  in pregnancy when compared to eutrophic patients. In addition, obese women had children with low/insufficient weight at birth with higher frequency.

**PERMANENT TEETH SEQUELS AFTER TRAUMA IN DECIDUOUS PREDECESSORS**JOYCE HELLEN VIEIRA SANTOS; MARCELO VENTURA DE ANDRADE; SIMONE CIPRIANO LOYOLA DA FONSECA  
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**Aim:** The dental traumatism is very common in any life stage, however it happens with more frequency in children. Beyond the future implications with relation to dental trauma in deciduous teeth and permanents, there are also functional and aesthetic related problems in patients, resulting emotional consequence on them. The aim of this study had a proposal a literature review about the sequels in permanent teeth after trauma in deciduous teeth, in order that the subject in question be more acquainted to dental surgeons and academics to provide an adequate treatment plan, minimizing future sequels.

**Method:** This review was elaborated from "Odontopediatria – GUEDES-PINTO" literature and specialized websites like dental magazine "Revista da Associação Paulista de Cirurgiões Dentistas" and periodicals, was searched for terms "teeth trauma", "deciduous trauma" and "tooth injuries".

**Results:** The deciduous teeth trauma when affecting the permanent teeth formation can result in sequels since white or yellow-brownish discolouration associated to enamel hypoplasia to kidnapping the permanent tooth germ, this flowing from a several dental intrusion of deciduous, leading to paralysis of the successor tooth. Some authors indicate as predisponent factor the type of occlusion, like open bite, and the lack of lip protection are the most prone to the dental trauma.

**Conclusion:** Concludes that there is a great importance of an adequate dental care for a correct diagnosis and treatment, keeping the patient under observation so that the damages to permanent dentition be minimized.

**PHOTODYNAMIC ANTIMICROBIAL CHEMOTHERAPY REDUCES EARLY COLONIZERS MICROORGANISMS FROM THE ORAL BIOFILM**JULIANA BENINE-WARLET; GABRIELA SANTANA DE PAULA; LUCIANA SOLERA SALES; MATEUS CARDOSO OLIVEIRA; MARCELO BORIOLLO; LIDIANY KARLA AZEVEDO RODRIGUES; MARINÉS NOBRE-DOS-SANTOS; CAROLINA STEINER-OLIVEIRA  
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**Aim:** Considering the cariogenic potential of early colonizing microorganisms in biofilm, alternatives have been sought for their reduction with innovative approaches. This study tested the effect of Photodynamic antimicrobial chemotherapy (PACT) on the early colonizing microorganisms in oral biofilm using the association of photosensitizer methylene blue with  $\beta$ -cyclodextrin nanoparticles and laser or LED on red light spectrum ( $\lambda = 660$  nm).

**Method:** A multispecies biofilm composed of *S. oralis*, *S. mitis*, *S. sanguinis* and *S. gordonii* was cultivated in 48-well plates containing BHI supplemented with sucrose 1% (w/v), for 24h, and the specimens were divided into the groups (n=9, in triplicate): C- (negative control, 0.9% NaCl), CX (positive control, 0.2% chlorhexidine), L (Laser), LED, P (Photosensitizer/Nanoparticle), LP (Laser+Photosensitizer/Nanoparticle) and LEDP (LED+Photosensitizer/Nanoparticle). Light irradiations were performed with laser at 9J for 113s (323J/cm<sup>2</sup>) or LED (light emitting diode) at 8.1J for 90s (8.1J/cm<sup>2</sup>). Viable biofilm microorganisms' were counted in selective culture media, before and after the treatments, to assess the microorganisms' reduction. Data normality was assessed by the Shapiro-Wilk test and the results were submitted to Kruskal-Wallis analysis, followed by Dunn's test ( $\alpha = 0.05$ ).

**Results:** A statistically significant reduction was found between C- group and the irradiated groups LP and LEDP. These latter did not statistically differ from the C+ group.

**Conclusion:** PACT mediated by methylene blue conjugated to  $\beta$ -cyclodextrin irradiated with LASER or LED reduced multispecies biofilm composed of early colonizing microorganisms.

**PHOTOGRAPHIC EVALUATION OF GINGIVAL COLOR VARIATION AFTER THE ROOT COVERAGE PROCEDURE**ISABELA RODRIGUES GONSALES; MATHEUS VÖLZ CARDOSO; GIOVANNA VICENZOTTI; ADRIANA CAMPOS PASSANEZI SANT'ANA; SEBASTIÃO LUIZ AGUIAR GREGHI; MARIANA SCHUTZER RAGGHIANI ZANGRANDO; CARLA ANDREOTTI DAMANTE  
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**Aim:** After root coverage procedures aesthetic and suitability of tissue color are outcomes related to patients. This study evaluated one method of quantifying tissue color in the postoperative periods of root coverage.

**Method:** In fifty-four patients treated by a root coverage procedure gingival color was measured by photography's taken in the baseline, immediate, and six months of follow up. The color was quantified from Adobe Photoshop CS6® software, programmed to generate results in the CIE L\*a\*b\* color space. L\* (luminosity), a\* (red-green), b\* (yellow-blue), and the color variation ( $\Delta E$ ) was calculated to compare test area (operated) with control area

(adjacent non-operated) and between periods (initial, immediate, 6 months postoperative). The values of the L\*a\*b\* and  $\Delta E$  were compared within groups using the Friedman complemented by the Dunn test (p<0.05). The comparison between test and control groups and  $\Delta E$  was done by the Mann-Whitney test.

**Results:** In 180 sites, the values of a\* and b\* showed variations in all periods (p<0.05), for the test and control areas. About the periods, there was a similarity between groups in the values of initial  $\Delta E$  and 6 months (p.0.361), there was a difference between the initial and six months in relation to the immediate (p<0.05), there was no difference for the  $\Delta E$  between the initial and six months (p>0.05).

**Conclusion:** Due to the large variations in the individual values of L\*, a\*, and b\* between the times, the comparison between periods (initial, immediate, and six months) shows to have less analytical sensitivity than the comparison between areas by the method used in this study.

**PORCINE DERMAL MATRIX FOR THE TREATMENT OF MULTIPLE GINGIVAL RECESIONS ASSOCIATED WITH NON-CARIOUS CERVICAL LESION**AMANDA ROSSATO; INGRID FERNANDES MATHIAS-SANTAMARIA; LAÍS FERNANDA FERREIRA FERRAZ; MANUELA MARIA VIANA MIGUEL; CRISTHIAN REYNALDO GOMEZ BAUTISTA; ANDRÉA CARVALHO DE MARCO; MAURO PEDRINE SANTAMARIA  
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**Aim:** Clinical studies assessed different surgical-restorative approaches to treat single gingival recessions associated with non-carious cervical lesions (NCCL). However, although they are a common clinical finding, insufficient evidence is available in the literature concerning the treatment of multiple gingival recessions associated with NCCL and the optimal clinical protocol for its treatment has not been established. Thus, this study aimed to compare two different multidisciplinary protocols through a randomized controlled clinical trial.

**Method:** For such purpose, forty patients with multiple adjacent gingival recessions associated with NCCL were enrolled and randomly allocated to one of the following groups: test group (n=20), partial restoration of NCCL and modified coronally advanced flap for root coverage associated with porcine acellular dermal matrix (MCAF+PR+XDM) and control group (n=20), partial restoration of NCCL and modified coronally advanced flap associated with connective tissue graft (MCAF+PR+CTG).

**Results:** After 6 months, combined defect coverage rates were 71.2% ( $2.5 \pm 1.1$ mm) for MCAF+PR+CTG and 59.7% ( $2 \pm 1.3$ mm) for MCAF+PR+XDM (p=0.1). MCAF+PR+CTG resulted in a greater gain of keratinized tissue (p<0.05). MCAF+PR+XDM resulted in lower postoperative pain and shorter surgical time (p=0.001). Both groups resulted in esthetic improvements (p>0.05).

**Conclusion:** Within the limitations of the present study, it can be concluded that both protocols were effective to treat multiple combined defects, and the use of porcine acellular dermal matrix was associated with lower postoperative pain and shorter chair time.

**PREVALENCE OF THE EMISSARY SPHENOIDAL FORAMEN: CONSIDERATIONS AND IMPLICATIONS FOR PERCUTANEOUS TRIGEMINAL BLOCK**LUCAS NOGUEIRA RAMOS; EMILLY DUTRA AMARAL MEGGIOLARO; AMANDA ALVES RAMOS; KENNEDY MARTINEZ DE OLIVEIRA  
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**Aim:** This study aimed to evaluate, in dry skulls, the presence of the foramen Vesalius or emissary sphenoidal foramen, a communication that will allow, if formed, the passage of a sphenoidal emissary vein that will establish a vascular pathway between the cranial cavity and the upper cervical region. This structure has a variable incidence and usually is located in the sphenoid bone greater wing, often between the foramen ovale and the scaphoid fossa.

**Method:** Thus, the collection of the Federal University of Juiz de Fora- Governador Valadares Campus was studied. Bilateral integrity of the middle third of the skull base was adopted as an eligibility criterion, excluding ethnic and gender characteristics. For the theoretical basement, the PubMed database was chosen and the terms "foramen Vesalius" AND "emissary sphenoidal foramen" were used. Date and language filters weren't applied.

**Results:** Thus, 32 skulls were admitted, of which 18 (56.25%) presented the formation of the foramen of Vesalius. Of these, 6 (33.3%) had bilateral foraminal condition. The others, 7 (38.9%), had it only in the right antimer.

**Conclusion:** It was found that the knowledge of this foraminal variant is relevant to the knowledge of cranial vascular accesses in infectious and/or thromboembolic disseminations, as well as for the surgical treatment of the middle cranial fossa. In addition, some percutaneous procedures aimed at punctures, via the foramen ovale, for blocking the trigeminal ganglion may fail due to foramen location error, sometimes associated with the presence of the foramen Vesalius, especially in relation to its diameter and proximity to the foramen ovale.

**PREVALENCE OF TRAUMATIC DENTAL INJURIES IN BRAZILIAN CHILDREN AND ADOLESCENTS - A META-ANALYSIS**WALBERT DE ANDRADE VIEIRA; VANESSA GALLEGOS ARIAS PECORARI; RODOLFO FIGUEIREDO DE ALMEIDA; JÚLIO VARGAS-NETO; EDUARDO ALMADA SANTOS; BRENDA PAULA FIGUEIREDO DE ALMEIDA GOMES; JOSÉ FLÁVIO AFFONSO DE ALMEIDA; ADRIANA DE JESUS SOARES  
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**Aim:** To investigate the prevalence of traumatic dental injuries (TDI) in Brazilian children and adolescents.

**Method:** A systematic review was conducted considering eight databases (PubMed, LILACS, Scielo, Scopus, Embase, Web of Science, OpenGrey and OpenThesis). The protocol was registered in PROSPERO. Only cross-sectional and cohort studies were included. The JBI Critical Appraisal Tools for Prevalence studies assessed the risk of bias. Heterogeneity among the studies was investigated using the I<sup>2</sup> test. A random-effects meta-analysis was performed. The funnel plot was used for the publication bias analysis. The GRADE tool assessed the certainty of evidence across included studies.

**Results:** The search resulted in 2,452 records, of which ninety-nine were included in the study. Most studies (81%) had a low risk of bias. In permanent teeth the prevalence of traumatic dental injuries was 20% (95% CI: 17.0 - 23.0) and in deciduous teeth the prevalence was 28% (95% CI: 23.0 - 33.0). The prevalence traumatic dental injuries among boys was 27% (95% CI: 24.0 - 30.0) and among girls was 21% (95% CI: 18.0 - 23.0). The I<sup>2</sup> was high (>75%) in all analyzes. The certainty of evidence was classified as having a very low level of certainty for all outcomes assessed.