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Oral Session O07 – Oral Medicine and Pathology 1

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Oral Session O07/Oral Medicine and Pathology 1

O07–48

Abstract withdrawn

O07–49

Oral lesions in children from 0 to 12 years old: 10 years experience

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Introduction: The exact prevalence of oral alterations in childhood is still not well known and the findings are often controversial. The aim of our study was to evaluate the prevalence of oral mucositis in children from 0 to 12 years-old, in order to improve the knowledge of these diseases. A retrospective cross-sectional study was designed, taking clinical charts from January 1997 till December 2007 into account.
Materials and methods: The data collected included age, gender and pathological diagnosis. 10128 children (from 0 to 12 years old) were enrolled. Clinical diagnostic criteria proposed by WHO were followed.
Results: The frequency of children presenting alterations was about 29.0% and no differences related to gender were observed. Sixteen different types of mucositis were diagnosed. The most common lesions recorded were candidiasis (28.4%), geographic tongue and other lesion of the tongue (18.5%), traumatic lesions (17.8%), recurrent aphthous stomatitis (16.3%), herpetic simplex virus infections (13.81%), and Erythema multiforme (0.9%). The sample was divided in two groups: the first one (60.7%), includes children with chronic diseases, tumours or in cancer therapy and the second one (39.3%) healthy children. Children suffering from chronic diseases have a higher frequency of oral lesions if compared with healthy children (chi-square = 173.0 $P < 0.01$.The frequency of mucosal alterations in children is quite high and some of them are associated with medical history of the patients.
Conclusions: Paediatric dentist must be able to knowledge oral mucositis that signal an underlying systemic disease to promote early and correct diagnosis and treatment.

O07–50

An unusual white lesion in a 10 month old child

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Introduction: Oral lesions commonly diagnosed in neonates include Epstein's pearls, Bohn's nodules, dental lamina cysts, natal teeth and congenital epulis. Nevertheless, intriguing cases which have rarely been reported in the literature are sometimes encountered by clinicians. We report a case of an unusual white lesion in a 10-month old male infant.
Clinical management: The infant's mother had noticed a small white swelling in the anterior region of the maxilla in the morning which increased in size by the late afternoon. Hence, she was urged by the paediatrician to seek dental advice. Intra-oral examination revealed a white mass (approximately 5 mm in diameter) in the maxillary right central incisor region, firm in consistency and adherent to the mucosa. Radiographic examination indicated that the white mass was radiolucent. The parents were reassured and advised to monitor the lesion. The parents returned 3 weeks later reporting that the white mass had, that day, shed spontaneously. It had a uniform hemispherical outline and measured 10 mm × 5 mm in diameter. Histopathological examination reported the mass to be acellular and amorphous; as it did not resemble any known bodily tissues, it was diagnosed as a 'foreign body'.
Conclusion: Infants tend to explore things with their mouths; hence they put anything they can hold into their oral cavity to determine the size and texture. This case serves to illustrate that the unexpected can occur and that in children the differential diagnosis should include a 'foreign body'.

O07–51

Incidence of oro-facial infection in children at hospital in Jeddah, Saudi Arabia

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Introduction: Acute infections of the oral cavity are in most cases the result of neglected dental caries. Early recognition and management of oro-facial infections in children is critical because rapid systemic involvement can occur. The aim of this study was to determine the occurrence of oro-facial infections and management in children attended the emergency dental clinics at Military Hospital in Jeddah.
Materials and methods: Data included all cases of oro-facial infection for children ≤ 15 years who presented for treatment during a 12-month period.
Results: 94 patients with oro-facial infection visited the hospital during this period (61 male, 33 female). Most of the oral infection cases were seen in children age 6–12 yrs old (53 cases). Most common cause of dental infection was due to caries (88%). 8 Source of infection was more often from the primary posterior teeth (84%). Extra-oral swelling was present in 64%. The upper face was more affected than the lower (50 compared to 44 cases). Hospitalization was required in 8 cases and 4 needed general anaesthesia to treat their infection. The most common treatment modality was the use of antibiotic therapy (93%).
Conclusions: Results showed that caries accounted for the majority of oral infections in these children. Although the disease may present as simple infection, it needs early and appropriate management to prevent serious complications. The high prevalence of caries and the high treatment needs highlight the importance of an early attendance of the child at the dentist for appropriate preventive measures.

O07–52

Plaque index and gingival index as statistical references of the state of gingiva

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Introduction: Bacteria from dental plaque are the primary cause of caries and periodontitis. Many etiological factors influence the activity of both diseases. The aim of this study was to investigate the correlation between plaque accumulation and gingival inflammation in children.
Patients and methods: The clinical examinations were conducted in 86 12–18-year-old children from 4 primary schools and one secondary school in Niš (Serbia). Dental plaque (PI) was scored according to the index by Löe and Sillness. Gingivitis was recorded using the PMA index by Schour and Massler (GI).
Results: All participants had PI values greater than 0, 47.7% had a PI between 1 and 2, 36% between 2 and 3, 16.3% had a PI between 0 and 1. 28 adolescents (32.6%) showed no clinical signs of gingivitis. A GI between 1 and 2, as a mild form of gingivitis, was observed in 50 (58.1%) of the adolescents. GI > 2 was observed in 8 (9.3%) respondents. The percentage of subjects with a healthy gingiva in 14 year-old adolescents is lower and increases in 16 years old adolescents. Major changes take place in younger age.
Conclusion: According to our data it can be concluded that the PI is directly proportional to GI.

O07–53

The presence of Porphyromonas gingivalis and Aggregatibacter actinomycetemcomitans among the children with gingivitis

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Introduction: Continuous accumulation of the biofilm results in gingivitis. This inflammation occurs as a direct response to bacteria in the oral biofilm. *Porphyromonas gingivalis* (P.g.) and *Aggregatibacter actinomycetemcomitans* (A.a.) are the two most important microorganisms which are implicated in the beginning of the gingivitis and periodontal disease. The aim of this work was to make a clinical evaluation of children with chronic gingivitis and to assess the prevalence of P.g. and A.a., by means of multiplex PCR, in their gingival pockets, before and after the therapy.
Patients and methods: Fifty children with permanent dentition and chronic gingivitis were enrolled in the study. The content from the gingival pockets was analysed by PCR for P.g. and A.a. identification before and after traditional therapy. Taking children's gingival pockets contents has been approved by the Ethics Committee of Medical Faculty in Nis, through the decision no. 01–7045, from 30.10.2007.
Results: A.a. was identified in the gingival pocket at 4% of the examinees, P.g. was identified at 4% of the examinees, while both A.a. and P.g. were identified at 10% of the examinees, before the therapy. After the therapy, A.a. was identified within the contents of the gingival sulcus at 8% of the examinees, and P.g. was identified at 4% of the examinees. After the therapy, the incidence of A.a. and P.g. was decreased, but without statistical significance.
Conclusion: P.g. and A.a. are found in the gingival pockets of children with chronic gingivitis before and after therapy, but without statistical significance. However, the presence of P.g. and A.a. in the gingival sulcus after the therapy, could be risk factor for repeated develop of gingivitis and its progression in the periodontal disease.

O07–54

Treatment of mucosal infections of the oral cavity in Kyrgyzstan

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Introduction: To compare efficacy of local treatment with Butadion ointment and combination of Rapin solution with Butadion ointment in patients with erosive-ulcer lesions of mucous membrane of oral cavity (MMOC).
Materials and methods: Within period of 2 years, 76 patients with erosive ulcer lesions of MMOC were subdivided into 2 groups according to local treatment modalities. 30 patients in group 1 (B) were treated by local application of Butadion ointment. Group 2 (B + R) comprised 46 patients who were treated by combined local therapy with Butadion ointment and Rapin solution. Each treatment was performed 3–4 times a day for 3 weeks. Clinical, cytological investigations of smears from lesions were carried out before and after treatment.
Results: In group (B) after therapy with Butadion ointment, mucosal oedema, tenderness, burning decreased in 30% of patients. In group (B + R), mucosal oedema disappeared in 95% of patients with marked reduction of pain, burning, rippling. All treatment modalities were well tolerated by all patients; new eruptions were not observed during treatment. Cytological investigations before treatment revealed great number of nucleo-segmented neutrophils, mononuclears indicating inflammatory destructive reactions in local lesions. After treatment total number of epithelial cells of all types, especially those of the third and fourth type increased considerably.
Conclusion: In this comparative clinical study good clinical results were obtained in all patients with erosive ulcer lesions of MMOC, but best results were observed by combined treatment with Rapin solution and Butadion ointment, which should now become standard of care in these frequently observed infections of oral cavity in Kyrgyzstan.

