INTERNATIONAL JOURNAL OF PAEDIATRIC DENTISTRY

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Editor-in-Chief Göran Dahllöf

Abstracts of the 22nd Congress of the International Association of Paediatric Dentistry Munich, Germany, 17–20 June 2009



Volume 19 – Suppl. 1 June 2009

The official journal of The International Association of Paediatric Dentistry The British Society of Paediatric Dentistry



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Oral Session O08 – Oral Medicine and Pathology 2

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O08-55

An unusual case of facial palsy

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Introduction: A 15-year-old boy attended the dental department at Alder Hey Children's Hospital complaining of left-sided facial weakness. History taking revealed that he attended his dentist 3 days before this complaining of dental pain. During this visit pericoronitis associated with lower left second permanent molar was diagnosed and treated under local anaesthetic. Immediately after the administration of an ID nerve block injection, the patient noticed a degree of facial palsy. This failed to improve and he was referred to a local hospital A&E department two days later. A provisional diagnosis of facial palsy due to anaesthetic infiltration close to the facial nerve was made and the patient was given analgesics, antibiotics, eye gel and discharged.

Clinical Management: Provisional diagnosis of Bell's palsy was made. Treatment included analgesics, anti- viral therapy and provision of an eye patch. At a 1 week review a MRI scan was done and the results reported a pansinusitis. However, pain and paralysis continued to worsen and the patient presented with grade III mobile lower molars. Two weeks later cervical lymphadenopathy was detected and the patient was admitted for cervical node biopsy, and a bone marrow aspirate. The final diagnosis was of acute lymphoblastic leukaemia (Burkitt's Type). The patient is currently under the care of the oncology team.

Conclusion: This case illustrates a rare but very relevant presentation of one of the most common and sinister of all childhood illnesses. It also demonstrates the role of the dental practitioner in early detection of childhood leukaemia.

O08-56

Psoriatic arthritis: temporomandibular joint involvement as the first articular phenomenon U. GARAGIOLA, V. CARLETTI, V. GHIGLIONE &

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Introduction: The aim is to underline the importance of the paediatric dentist and orthodontist in the contribution to the early diagnosis of Psoriatic Arthritis, avoiding and preventing the orofacial and systemic complications. Psoriatic Arthritis (PA) is a chronic systemic disease that is difficult to detect. The diagnosis is made mainly on clinical grounds based on the findings of psoriasis and inflammatory arthritis of the joints. Many reports have described the damaging effects of PA on the temporomandibular joints (TMJs), but no study has clearly reported the TMJ as the first articulation to be involved in PA.

Clinical Management: This work reports a case of PA that was diagnosed several years after a TMJ onset because no other signs apart from psoriasis were present. The missed early diagnosis resulted in severe TMJ damage. The TMJ can be the first joint involved in PA. It is often unilateral, with a sudden onset. Symptoms include pain and tenderness of the joint area and the muscles of mastication, morning stiffness, tiredness in the jaws, joint crepitation, occasional painful swelling of the TMJ capsule and painful mandibular movements associated with a progressive decrease in the interincisal opening. In severe cases, ankylosis of the TMJ may occur.

Conclusion: For a correct, early diagnosis of PA, collaboration between the dentist and rheumatologist it is very important. The dentist should recommend in addition to exercise and local pain treatment, an occlusal splint to help keep the TMJs working properly, improve function, relieve pain, reduce swelling, and prevent further severe TMJ damage.

O08–57

Salivary secretion rates after pediatric stem cell transplantation

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Introduction: Salivary secretions are affected by conditioning prior to stem cell transplantation in children and adolescents. Single dose total body irradiation (sTBI) combined with cyclophosphamide (CY) may induce a permanent reduction of salivary function. The objective was to study if fractionated TBI (fTBI) or busulfan (BU) induce less salivary dysfunction compared to sTBI and that treatment at young age will cause a more severe salivary dysfunction.

Patients and methods: Thirty-seven children received s TBI (10 Gy), 9 children received fTBI (3 x 4 Gy) and 23 children received oral BU (16 mg/kg) all combined with CY (120 mg/kg). They were treated for haematological malignancies, genetic diseases and severe immune deficiencies between 1 and 13 years of age. At 15, the children were subjected to a clinical dental examination and both the unstimulated and stimulated salivary secretion rates were determined.

Results: At 15 there were no significant differences in unstimulated salivary secretion rate between the three groups. With regard to stimulated secretion sTBI/CY resulted in a significantly lower stimulated salivary output (0.8 ± 0.4) compared to fTBI/CY (1.2 ± 0.7 ; P = 0.0404). In children conditioned with sTBI there was a significant inverse correlation between age at TBI and stimulated salivary secretion rate (r = 0.341; P = 0.0384). In children treated with BU/CY the secretion rate was correlated to the total dose of BU administered (r = 0.487; P = 0.0186).

Conclusion: Children conditioned with sTBI had a significantly lower stimulated salivary secretion rate compared to fTBI. Young age at exposure to sTBI results in significantly lower stimulated salivary secretion rate at 15 year of age.

O08–58

Evaluation of teledentistry learning object applied to anesthesia/exodontics for Pediatric Dentistry

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Introduction: Images (3D anatomic structures with physiological movements) of high visual and didactic quality were developed by the Virtual Man Project (FMUSP/FOUSP). Its great benefit is that it condenses hours of theoretical class into minutes of directed study, which represents an innovative and motivating aspect. The purpose of this paper is to verify the acceptance of the use of a new Teledentistry learning object applied to Pediatric Dentistry.

Materials and methods: An evaluation questionnaire regarding the contents used for the subject of Pediatric Dental Surgery was applied to graduation and post-graduation students, teachers and public-service professionals, where each volunteer (n = 387) assigned values to the topics in order to classify them as fundamental or complementary to the learning process of the subject, using as reference the competences and skills required for the procedures involved in providing clinical service. Developing the learning object was aided by systematizing the results obtained from the completed questionnaires, and a new questionnaire was used to evaluate the acceptance of this object in the teaching-learning process.

Results: Based on skills and competences (Pearson chi-square test), the most relevant of the main contents evaluated in the subject of Pediatric Dentistry were Basic principles of surgical procedures (P = 0.002), Mandibular block technique (P = 0.001) and Accidents and Complications (P < 0.001) were.

Conclusion: All the volunteers enjoyed participating as a subject in the teaching-learning process, as well as evaluating and analyzing the contents and the video, and the acceptance of the use of teledentistry as an educational resource applied to anesthesia and exodontics for Pediatric Dentistry was 98.7%.

O08–59

Pseudotumours in children with Blood dyscrasias

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Introduction: Pseudotumour is a complication in patients with bleeding diathesis resulting from recurrent haemorrhage in tissues. Pseudotumours have been reported in the oral regions and pertinent management is necessary to prevent serious complications such as distortion and even erosion of the adjacent bone. This paper presents reports of pseudotumours in 3 children afflicted with haemophilia, idiopathic thrombocytopenic purpura and von Willebrand disease respectively.

Clinical management: The haemophilia patient was referred for a persistent radiolucent swelling following a fall and extraction of deciduous incisors and managed by cyst evacuation. The ITP patient also presented with a swelling that rapidly increased in size. CT revealed an enhancing solid tumour mass occupying the left maxillary sinus with bony erosion and muscle infiltration. The lesion was subsequently enucleated when histopathological examination showed no evidence of malignancy. The child with the vWD Type III was referred for bilateral swelling of the mandible which on CT scan showed an expansile lytic lesion involving the body of mandible bilaterally, with thinning of the cortex and multiple cervical lymphadenopathy suggestive of malignancy. Histopathologically, the lesion showed a cystic lesion with

granulation tissue wall. The lesions in these patients were surgically evacuated under the necessary factor and other blood component cover.

Conclusion: Thorough understanding of swellings in children is important, especially so in those with bleeding diathesis, since they can mimic malignancy and if inappropriately diagnosed and insufficiently managed may give rise to serious complications.

O08–60

Early detection of Behcet's Syndrome

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Introduction: Behcet's syndrome is a multisystemic disorder, which primarily affect the oral, genital, and ocular regions. Its causation has not been established yet, and it has been diagnosed based on clinical features. A 6-year old girl was referred to our department from pediatric department for evaluation and treatment of severe oral ulceration and dysphagia. She had been hospitalized for high fever, abdominal pain, vomiting. According to her parents, oral ulceration has been recurring. Two major type aphthous ulcerations were found on the soft palate. On her legs, erythematous rash-like appearance was observed.

Clinical Mangement: We prescribed topical anesthesia to relief dysphagia and notified her medical doctor about the possibility of Behcet's Syndome. After application of topical anesthesia, she was able to swallow and eat mills. In addition, she was referred to department of dermatology and ophthalmology for evaluation of possibility of Behcet's syndrome. Under the impression of Behcet's syndrome, corticosteroid and immunosuppressive agents were administered, and her general condition improved.

Conclusion: Behcet's syndrome occurs rarely in children. Oral ulceration is the major manifestation of Behcet's syndrome, and it appears as the first clinical sign in most cases, especially in children. Its early detection and treatment are crucial for prevention of exacerbation of symptoms, which determines prognosis. In this case, early detection of Behcet's syndrome was possible through clinical examinations and history taking in dental field and careful inspection in the medical field. The patient's ill-defined clinical symptoms were controlled with proper treatment under impression of Behcet's Syndome.

O08-61

Dental treatment in children under general anaesthesia: the retrospective study

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Introduction: Dental treatment of high caries risk children often needs multiple extractions and restorations. Most of these patients are unable to cooperate due to low age and extended treatment. Dental treatment under general anaesthesia (GA) is then the method of choice. The aim of this study is to present our results and experiences of dental treatment of children under GA.

Patients and methods: 317 of children (187 boys, 130 girls) aged 6 months to 16 years were treated from 2004 till 2008. Indication for GA was extensive dental treatment in uncooperative children based on informed consent of parents.

Results: 2176 teeth have been treated, 1948 (89.5%) deciduous and 228 (10.5%) permanent. The most frequent types of treatment were

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extractions (1706), 1588 (93%) of primary and 118 (7%) of permanent teeth. The total number of restorations was 470 (361, 76.9% in primary and 109, 23.1% in permanent teeth). Other types of treatment were germectomy, suture of soft tissues, reposition of bone fractures and extirpation of cysts – 13.3% from all treatment procedures. The authors did not record any complication in the course of treatment and immediately afterwards, requiring unplanned hospitalisation and unfavourably affecting the health status of the child.

Conclusion: There was no negative experience in children after the treatment, which would result in subsequent refuse of dental care. The cost and availability of anaesthesiology care are the only limiting factors of more frequent use of this type of treatment in children.

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