Other journals in brief

A selection of abstracts of clinically relevant papers from other journals.

The abstracts on this page have been chosen and edited by Reena Wadia

Leukaemic children – oral manifestations

Orofacial manifestations of leukemic children on treatment:

A descriptive study

Aggarwal A, Pai KM. *Int J Clin Paediatr Dent* 2018; **11**: 193–198.

Orofacial manifestations may be seen as the first sign of leukaemia and a dentist may play a significant role in the diagnosis of the disease.

Acute leukaemias account for 80% of childhood malignancies. They are characterised by a high incidence and range of orofacial manifestations, which may occur on initial presentation or secondary to treatment. This prospective descriptive study considered the prevalence of orofacial manifestations in leukaemic children undergoing treatment and aimed to correlate these manifestations with the various stages of chemotherapy. The study included 43 acute lymphocytic leukaemic paediatric patients, who were examined on the day of each blood examination. Lesions were recorded on a self-designed proforma. A total of 133 observations were recorded by a single observer. The treatment was divided into the phase of induction, consolidation, maintenance, and relapse. The common oral lesions seen were dental caries, lymphadenopathy (86%), pallor (65%), ulcers (14%), mucositis (16%), gingival enlargement, haemorrhages (21%), candidiasis, herpes simplex virus infection, xerostomia (44%), paraesthesia and tooth mobility. Herpes simplex virus infection was seen only during induction and consolidation phases. Ulcers were seen during all phases of therapy.

DOI: 10.1038/sj.bdj.2018.837

Early loss of primary molars and impact on quality of life

Prevalence of early loss of primary molar and its impact in schoolchildren's quality of life.

Monte-Santo AS *et al.* *Int J Paediatr Dent* 2018; doi: 10.1111/ipd.12416. [Epub ahead of print]

The prevalence of early loss of primary molars is high and it negatively impacts the oral health-related quality of life of children aged 8–9 years.

This study aimed to evaluate the prevalence of premature loss of primary molars in schoolchildren and its impact on oral health-related quality of life (OHRQoL) as the authors believed the evidence for this was lacking. Six hundred and sixty-seven children aged 8–9 years enrolled in public and private schools from Aracaju (Brazil) were selected. The presence of untreated dental caries and early loss of primary molars were recorded, and its impacts on OHRQoL was evaluated using the Child Perceptions Questionnaire (CPQ_{8–10}). Influence of some variables on tooth loss and OHRQoL was assessed by multilevel Poisson's regression analysis ($P < 0.05$). The prevalence for early tooth loss was 65.4%. Early loss of primary molars provoked negative impact on OHRQoL within the domains of 'oral symptoms', 'functional limitations' and 'emotional well-being'.

DOI: 10.1038/sj.bdj.2018.839

Dental needs in cerebral paralysis and Down syndrome

A study of the dental treatment needs of special patients: cerebral paralysis and Down syndrome.

Rodriguez PN *et al.* *Eur J Paediatr Dent* 2018; **19**: 233–238.

Patients with cerebral paralysis and Down syndrome require early dental care in order to prevent and limit the severity of the pathologies observed.

Within the group of patients with special needs, cerebral paralysis (CP) and Down syndrome (DS) are two of the most common. They not only affect the patients' general health but also their craniofacial growth and development. These patients are also more prone to developing oral diseases. The aim of this observational cross-sectional study was to compare the dental characteristics and oral healthcare needs of patients with CP and DS. The selected sample consisted of 28 patients of both sexes between 10 and 20 years of age. Fifty percent of the patients with CP presented with dental trauma, compared to 15% of the patients with DS. Dental prophylaxis was the most prevalent treatment in both groups (77% in CP compared to 87% in DS). The most frequent habit was mouth breathing, which was found in 69% of the patients with CP and 80% of those with DS.

DOI: 10.1038/sj.bdj.2018.838

What children notice

Eye-tracking in dentistry: What do children notice in the dentist?

Celine G *et al.* *J Dent* 2018; doi: 10.1016/j.jdent.2018.08.006. [Epub ahead of print]

Children fixated most on the dentist's face particularly the circum-oral area, followed by attire. Distractors were able to draw the children's gaze.

A total of 41 children, aged 4–12, viewed 10 images of dentists of different genders and ethnicities, and wearing different attires, on a computer screen. A Tobii X2-60 eye-tracking camera was used, which followed the location of participants' gaze as they look at images on a screen. Areas of interest were pre-defined on each image (eg eyes, mouth, shirt). Other images were displayed between dentist images and no consecutive dentist images were displayed. The number of participants to fixate and the mean length of fixation for each area of interest were measured. Visual assessment illustrated that the dentist's face had the highest concentration of fixations, followed by attire. The circum-oral area had significantly more fixations than the eyes. The number of fixations and the mean length of fixation were both longer for the face than for the attire, and for the circum-oral area compared to the eyes. Distractors such as pens and ties exhibited more and longer fixations compared to images without distractors.

DOI: 10.1038/sj.bdj.2018.840