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 John R. Radford.

FOLDING DENTURE

Sectional impressions and simplified folding complete denture for severe microstomia

Givan DA, AuClair WA et al. J Prosthodont 2010; 19: 299-302

Provision of an upper full prosthesis in a patient with severely reduced mouth opening.

In the introduction, different methods are revisited to provide removable prostheses for patients with severe microstomia. The prosthetic treatment of a patient who was only able to open their mouth 35 mm, is then described. Their microsomia was as a consequence of reconstruction of their lower lip with a radial forearm flap, after ablation surgery for a squamous cell carcinoma. A secondary impression of the upper denture bearing area was recorded with a sectioned custom impression tray with interlocking handles. The denture maxillary base was made-up from two segments connected by a hinge. The hinge comprised a cast 10-gauge hollow sprue into which was inserted a 18-gauge straight stainless steel wrought wire. When in the mouth, in order to keep the denture in the unfolded position, a 'plunger attachment' was placed between the canine and premolar teeth. DOI: 10.1038/sj.bdj.2011.111

ZINC SUPPLEMENTS

Zinc deficiency may be a cause of burning mouth syndrome as zinc replacement therapy has therapeutic effects

Cho GS, Han MW et al. J Oral Pathol Med 2010; 39: 722-727

In those patients with burning mouth syndrome (BMS) who were 'zinc deficient', zinc replacement therapy had favourable outcomes.

In a group of 276 patients with BMS, the authors report that 26.8% had low serum zinc levels. A sub-group of 32 patients who had low serum zinc levels, then received zinc replacement (14.1 mg/day) plus a steroid gargle. A control group of 23 patients were prescribed the steroid gargle only. Six months later, the 'mean decrease in pain score after treatment were significantly greater in the zinc replacement than in the control group' (p = 0.004). Interestingly, over half the subjects in the control group also reported complete or partial relief of symptoms. In a separate experiment using Sprague-Dawley male rats, zinc deficiency was associated with 'hyperkeratinisation and increased mitosis on the dorsum of the tongue'. DOI: 10.1038/sj.bdj.2011.112

UNTOWARD INCIDENT

Wrong tooth extraction: root cause analysis

Peleg O, Givot N et al. Quintessence Int 2010; 41: 869-872

In order to avoid extracting the wrong tooth, not only should there be clear communication with the referring colleague, but the patient must be told which tooth is to be extracted.

This paper reports a retrospective analysis of 54 claims for extraction of the wrong tooth. The data was gathered by a company that insures 70% of all dentists working in Israel. Most of the teeth scheduled for extraction, were for orthodontic reasons. Twenty-six percent of the errors were as a consequence of mistakes in treatment planning and in the referral letter. The rest were operative errors (*viz.* the wrong tooth being extracted). The majority of these mistakes occurred in polyclinics. Almost a quarter of the dentists did not admit culpability although the insurance company found liability in 89% of cases. In order to avoid this, particular emphasis should be placed on confirming with the patient which tooth is to be extraction.

DOI: 10.1038/sj.bdj.2011.113

'IN A WORLD OF UNCERTAINTY'

Should warfarin be discontinued before a dental extraction? A decision-tree analysis

Balevi B. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2010; 110: 691-697

Balancing true and perceived risks.

The author cites a paper published in this journal (Br Dent J 2007; 203: 389-393) that 'recommend that oral anticoagulants should not be discontinued in the majority of patients requiring dental extraction.' This paper uses clinical decision-tree analysis (DTA). It weighs up the sometimes competing priorities such as patient preferences (perceived utility) and research evidence. A DTA was calculated for a '60-year-old patient with a medical history of a prosthetic heart valve and a pre-treatment INR of <4'. Meta analyses were used to obtain values for the risk of 1) developing a stroke (the literature reports that 'the risk of a CVA is negligible' for a short-term 'warfarinwithheld patient'), and 2) the probability of a major bleeding after tooth extraction. The author concludes that the warfarin regimen should not be changed when extracting a single tooth but when there are 'multiple dental extractions, withholding warfarin may be indicated'.

DOI: 10.1038/sj.bdj.2011.114