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.

HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)

Effects of long-term use of HAART on oral health status of HIV-infected subjects

Nittayananta W, Talungchit S *et al.* *J Oral Pathol Med* 2010; **39**: 397–406

'HIV-infected subjects without HAART showed a greater risk of feeling dry in the mouth than those with short-term HAART'.

HAART comprises more than 30 different drugs in six separate classes. Multiple logistic regression was used to determine the effects of HAART on oral health status of 1) 99 HIV-infected subjects on this drug regimen, 2) 58 HIV-infected subjects not on HAART and 3) 50 non-HIV controls. The authors state that hyperpigmentation was the most common oral lesion observed in those subjects who were on HAART. Apart from its effects on xerostomia, they also argue that the short-term use of this therapy reduces the prevalence of oral candidiasis and oral hairy leukoplakia. In this study, no oral warts were observed in those on HAART. This is in contrast to other studies when such lesions 'may represent a form of immune reconstitution syndrome' for those on such therapy.

DOI: 10.1038/sj.bdj.2010.742

DISTRACTION OSTEOGENESIS

Miniscrew-anchored alveolar distraction for the treatment of the ankylosed maxillary central incisor

Im J-J, Kye MK *et al.* *Dental Traumatol* 2010; **26**: 285–288

Preparing a site for a possible future use of an implant reconstruction with a predictable outcome.

Miniscrews are increasingly being used in orthodontic treatment. Of course distinct from these, are alveolar distraction devices and their use have become 'one of the most predictable treatment methods for ankylosed teeth'. This case report describes the treatment of a patient using miniscrews to fix an alveolar distraction device. It was used to successfully extrude an ankylosed upper central incisor tooth and remodel the osseous support and gingival drape. The 'rate of distraction was 0.5 mm a day'. Although a radiograph suggests that about 2/3rd of the root of this tooth had undergone replacement resorption before this treatment and such treatment was invasive, the authors suggest that this approach has prepared the site for future implant replacement with a more predictable dental aesthetic.

DOI: 10.1038/sj.bdj.2010.743

CRACKED TOOTH SYNDROME

Cracked teeth: a review of the literature

Lubisich EB, Hilton TJ *et al.* *J Esthet Restor Dent* 2010; **22**: 158–167

Not all studies show that bonded restorations minimise cracked tooth syndrome (CTS).

Removal of all existing restorative materials (*strip-outs*) in a tooth when the working diagnosis is CTS, is important in order to try to establish the extent of the crack and subsequent treatment options. Non-functional cusps appear to fracture with a higher frequency when compared with functional cusps, purportedly as a consequence of their morphology. Teeth with CTS and reversible pulpitis can be restored with a full coverage restoration, possibly preceded by a sedative dressing and 'cementing an orthodontic band for stabilization.' There is a lack of consensus as to when a tooth is at risk from CTS, yet it has been reported that more than 40% of crowns are placed to prevent such fracture. Generally, this review revisits the usual suspects.

DOI: 10.1038/sj.bdj.2010.744

IMPLANT ABUTMENT

Tooth-to-implant connection: a systematic review of the literature and a case report utilizing a new connection design

Chee WW, Mordochai N. *Clin Implant Dent and Rel Res* 2010; **12**: 122–133

'Totally implant-supported prostheses (as opposed to implants connected to natural teeth) should be the treatment of choice.'

Based on observational studies, there is a consistent observation that when a natural tooth is connected to an implant, the natural tooth (possibly only those that are periodontally healthy) intrudes. This is referred to vernacularly, as the 'ratchet effect'. A reason for this is that the periodontal ligament 'provides a physiological horizontal mobility in the range of 150 to 200 μm ', whereas implants are constrained to movements from 17 to 66 μm . Intrusion occurs as a consequence of debris impaction between the maternal and paternal component. In this study, using a MEDLINE search, no level 1s evidence (randomized controlled clinical trials) were identified comparing different ways of connecting implants to natural teeth with fixed prostheses. Nevertheless, this paper describes several methods with an aim of connecting predictably an implant to a natural tooth abutment.

DOI: 10.1038/sj.bdj.2010.745