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.

IMPLANT DENTISTRY

Connecting teeth to implants: the truth about a debated technique

Spear F. *J Am Dent Assoc* 2009; **140**: 587-593

Another implant paradigm challenged.

Tenets such as 'dentists must place implants where (there is) bone' and 'a maxillary canine implant cannot serve alone as the primary guidance' have now been revised. This paper explores another paradigm that 'Natural teeth cannot be directly connected to implants'. The original reason for connecting implants to natural teeth was to prevent the superstructure rotating. Such an arrangement is now unnecessary as anti-rotational components such as the internal-hex and external-hex can be incorporated into the implant or superstructure. Notwithstanding this, it is argued that it is acceptable to join implants to natural teeth when 1) spreading unfavourable parafunctional forces, 2) to control dento-gingival aesthetics by keeping the natural tooth, 3) when there is lack of space and 4) financial constraints. However, connecting implants to natural teeth is not without its drawbacks such as the breakdown of osseointegration due to overloading.

DOI: 10.1038/sj.bdj.2009.631

EARLY ORTHODONTIC TREATMENT

Early treatment for Class II malocclusion and perceived improvements in facial profile.

O'Brien K, Macfarlane T *et al. Am J Orthod Dentofacial Orthop* 2009; **135**: 580-585

'Early orthodontic treatment (for Class II malocclusions) resulted in improved perceptions of facial profile attractiveness.'

Children and teachers assessed the silhouetted profiles of 20 patients who had received early orthodontic treatment for Class II malocclusion with overjets of at least 7 mm and 20 untreated controls. These patients were randomly selected from 174 subjects, aged 8-10 years old, who had been recruited to a multi-centre, randomized, controlled trial examining the effectiveness of early Twin-block appliance treatment. The results reported in this study showed that those who received early orthodontic treatment were more attractive. The authors assert that the use of silhouettes minimises confounding effects of attractiveness such as facial expression and colouring in addition to maintaining anonymity.

DOI: 10.1038/sj.bdj.2009.632

BITEWINGS IN THE PRIMARY DENTITION

Clinical detection of caries in the primary dentition with and without bitewing radiography

Newman B, Seow WK *et al. Aust Dent J* 2009; **54**: 23-30

'bitewing radiography (should) be included as part of the routine examination of children...'

A visual-tactile dental examination and a bitewing radiographic examination were carried out on 611 6-12-year-olds living in a non-fluoridated area in Queensland, Australia. Comparisons between the different methods of examination were made at the restorative threshold (when 'operative' treatment was indicated). The investigators used a clinical gold standard that comprised the summation of the visual-tactile and radiographic examinations for each tooth surface. This study was restricted to the examination of primary teeth. When diagnosing interdental caries, bitewing radiographs identified 91% of lesions compared to only 43% using the visual-tactile technique. When considering occlusal caries, bitewing radiography identified 74% of sites compared to 62% using the visual-tactile method.

DOI: 10.1038/sj.bdj.2009.633

COGNITIVE ABILITY AND ORAL HEALTH

The role of cognitive ability in socio-economic inequalities in oral health

Sabbah W, Watt RG *et al. J Dent Res* 2009; **88**: 351-355

'...socio-economic inequalities in oral health remained after taking cognitive ability into consideration.'

Oral health outcomes as shown by tooth loss, periodontal attachment loss and gingival bleeding, were obtained from the Third National Health and Nutrition Examination Survey (NHANES III) in 4,465 individuals aged 20-59 years. Three tests were used to reflect cognitive ability and two variables to measure socio-economic factors. There were 'associations between oral health indicators and socio-economic indicators attenuated after adjustment for cognitive tests'. The authors suggested several possible explanations. These range from a reduction in salivary secretion caused by drugs used to control dementia, less than ideal self-care, poor nutrition or a common 'inflammatory pathway linking periodontal disease and cognition'. It was acknowledged that 'longitudinal data, is needed to confirm the direction and mechanism of the association between cognitive ability and socio-economic inequalities in oral health'.

DOI: 10.1038/sj.bdj.2009.634