

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.

TEMPOROMANDIBULAR JOINT SPACE

Stereometric assessment of TMJ space variation by occlusal splints

Ettlin DA, Mang H *et al. J Dent Res* 2008; **87**: 877-881

Occlusal splints, worn by asymptomatic subjects, result in increases in temporomandibular joint space.

Studies and reports have shown that the use of an occlusal splint will alleviate signs and symptoms of temporomandibular joint (TMJ) dysfunction. However, the mode of action of such appliances is not known. This study examined the dynamic intra-articular distances in ten asymptomatic subjects (20 TMJs in total) with and without using an occlusal splint (Michigan Splint). Dynamic stereometry was used and this technique comprises combining data from magnetic resonance imaging and opto-electronic jaw tracking. In habitual closure and excursions 'occlusal splints led to minor—yet statistically significant—increases of global TMJ space and to larger increases at defined condylar areas' and a 'new distribution of contact areas between joint surfaces'. In the Discussion, the authors state that their data 'cannot be extrapolated to pain patients', or do they stray into the areas of disc-recapture.

DOI: 10.1038/sj.bdj.2009.117

WHITE SPOTS: ORTHODONTIC TREATMENT

Potential remineralization of postorthodontic demineralized enamel and the use of enamel microabrasion and bleaching for esthetics

Donly KJ, Sasa IS. *Semin Orthod* 2008; **14**: 220-225

Possible role for microabrasion and tooth whitening to treat 'white spot lesions'.

A high impact complication associated with orthodontic treatment, are unaesthetic 'white spot lesions'. These can be minimised during active orthodontic treatment by meticulous home care and fluoride supplements. If white spots have occurred, it would appear that the authors favour the use of casein phosphopeptide-amorphous calcium phosphate (CPP-ACP) to encourage remineralisation. If the appearance is still unacceptable, microabrasion can be attempted. This results in 'a portion of the whitened enamel (being) removed and a portion camouflaged by the highly polished surface'. The authors also recommend tooth whitening to manage white spots.

DOI: 10.1038/sj.bdj.2009.118

METHAMPHETAMINE

Meth mouth

Heng CK, Badner VM *et al. NY State Dent J* 2008; **August/September**: 50-51

Caution when using local anaesthetics containing adrenaline/epinephrine for those who use methamphetamine.

Despite the then anticipated 'crystal meth' epidemic not materialising in the UK, in 2007 the Government reclassified methamphetamine as a Class A Drug. Methamphetamine is 'easily manufactured from ordinary household chemicals, making it "cheap," relative to other drugs, and it is highly psychologically addictive'. Its use may result in extensive and widespread caries, vernacularly referred to as 'meth mouth'. This is because this drug causes profound xerostomia, has 12 hour duration of action compared with 2 hours for cocaine, and 'users drink sugared soda to quench their thirst and satisfy their craving for sweets'. The dental management of the signs and symptoms caused by methamphetamine are described, particularly the use of adhesive dental materials to restore the 'so-called apple-core preps'. The authors remind the reader that methamphetamine can potentiate the sympathomimetic effects of adrenaline/epinephrine in local anaesthetics which could result in an hypertensive crisis or a cerebral vascular accident.

DOI: 10.1038/sj.bdj.2009.119

ORAL MALODOUR

Influence of gender and menstrual cycle on volatile sulphur compounds production

Calil CM, Lima PO *et al. Arch Oral Biol* 2008; **53**: 1107-1112

Oral malodour may be associated with menstruation.

In a well designed study, volatile sulphur compounds (VSC), salivary flow, and other measurements were compared in 14 women across their menstrual cycle with that in 17 men. All subjects were healthy, did not smoke and had excellent oral health. The authors concede that oral malodour is usually associated with periodontal disease. In the menstrual and premenstrual phases, VSC were significantly higher, whereas salivary flow was significantly lower, when compared with the follicular phase and those measurements recorded in men. In the Discussion, the authors suggest 'the lower VSC index found in men could be associated with androgens' and speculate on this possible implication.

DOI: 10.1038/sj.bdj.2009.120