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.

CANNABIS

Cannabis use and destructive periodontal diseases among adolescents

López R, Baelum V. J Clin Periodontol 2009; 36: 185-189

Cannabis users who do not smoke experience significantly less necrotising ulcerative gingivitis (NUG).

Interestingly, cannabinoids suppress inflammatory processes whereas nicotine promotes them. In this cross-sectional study, Chilean High School students (n = 9,163) were examined for clinical attachment loss (CAL) and 'presence of NUG'. Multiple logistic regression analysis, adjusted for covariates, was used to identify associations between these outcome measures for destructive periodontal disease and cannabis exposure, taking account of smoking habits (did not use/'pack-years of tobacco use'). Among non-smokers, cannabis use was significantly negatively associated with NUG (OR = 0.47). In addition, there was no association between cannabis use and CAL \leq 3 mm, regardless of smoking.

DOI: 10.1038/sj.bdj.2009.367

HYPOMINERALISATION

Aetiology of molar–incisor hypomineralization: a critical review

Crombie F, Manton D et al. Int J Paed Dent 2009; 19: 73-83

Evidence lacking as to the causes of molar-incisor hypomineralisation.

These investigators carried out a systematic search of the literature relating to the causes of molar-incisor hypomineralisation (MIH) although they acknowledge there is a lack of consensus as to what constitutes this condition. The level and quality of evidence were assessed using the Australian national guidelines. From 1,123 articles identified, 53 were interrogated further. It should be noted that the authors did not exclude those papers on the primary dentition. There was 'moderate evidence that polychlorinated biphenyls (PCBs) and dioxins are associated with enamel defects' but not breastfeeding duration per se. Contrary to anecdote, there was only weak evidence for the role of pre-, peri- and neonatal problems although 'such data is complicated by strong associations between many of the variables'. The evidence was even weaker implicating fluoride in the cause of demarcated defects characteristic of MIH.

DOI: 10.1038/sj.bdj.2009.368

DENTURE STOMATITIS

Vinegar as an antimicrobial agent for control of *Candida* spp. in complete denture wearers

Pinto TMS, Neves ACC et al. JAppl Oral Sci 2008; 16: 385-390

Steeping dentures in vinegar in combination with a cleaning regimen may have a role in treating denture stomatitis.

In this study, 48 selected patients, all of whom harboured *Candida* spp., were instructed to keep their dentures immersed in 10% vinegar solution (pH <3) overnight, for 45 days. In addition to this, a denture-cleaning regimen was instituted. After treatment, there was both a reduction in counts of *Candida* spp. and an improvement in denture-induced stomatitis. There was also a narrowing in the diversity of *Candida* spp. isolated after treatment. This observation should be interpreted with the findings from a recent study that showed there was greater fungus diversity in those biofilms isolated from subjects who are healthy. It was not possible from this study to ascribe the effects to the vinegar or the denture cleaning. In addition, there was no control group.

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APICAL AND/OR CORONAL SEAL

In vitro comparison of three different lengths of remaining gutta-percha for establishment of apical seal after post-space preparation

Rahimi S, Shahi S et al. J Oral Sci 2008; 50: 435-439

What length of apical gutta percha should be left when preparing post spaces?

Endodontic treatment was carried out on extracted maxillary anterior teeth that were 'checked for cracks'. Post spaces were prepared leaving 4, 5 and 6 mm of remaining gutta percha. The teeth were immersed in India Ink for three days, sectioned and dye leakage was measured using a stereomicroscope. Each group comprised 32 teeth and the investigators used another 30 teeth as controls. Analysis of variance showed that increasing the length of remaining gutta perch from 4 mm to 6 mm significantly reduced micro leakage. However, in all groups the mean leakage recorded was less than 1 mm. The authors touch on the relative importance of achieving coronal and/or apical seal but do not assert that the only way to resolve this conundrum is to carry out survival analysis studies, with sufficient statistical power, on endodontically teeth restored with post-retained crowns.

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