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.

SENSIBILITY TESTING

The ability of pulp sensibility tests to evaluate the pulp status in primary teeth

Hori A, Poureslami HR et al. Int J Paediatr Dent 2011; 21: 441-445

Pulp 'vitality' testing of primary teeth lacks some validity.

This study examined if 1) an electronic pulp tester (SybronEndo, Vitality Scanner model 2006), 2) cold (ROEKO ENDO-FROST) and 3) heat (heated gutta percha) could identify vital pulps in primary teeth when the pulp was judged vital (sensitivity analysis), and identify non-vital pulps (specificity analysis). Absence or presence of pulpal bleeding after accessing the pulp of those teeth scheduled for pulpal treatment, and intact teeth that were neither restored nor carious were indicative of pulpal status. The sensibility tests were carried out on 78 teeth in 36 children. It was not stated whether sphericity was violated as a consequence of repeated measures. The sensitivity for electronic pulp tester, cold and heat was 80%, 73.3% and 86.7% and the specificity was also less than ideal (92.5%, 75% and 70.7%, respectively).

DOI: 10.1038/sj.bdj.2012.220

FORENSICS – PRODUCT NAMES IN CLINICAL NOTES

The crash of Colgan Air flight 3407: advanced techniques in victim identification

Bush M, Miller R. JAm Dent Assoc 2011; 142: 1352-1356

The Coroner/Procurator Fiscal, or equivalent in the US, has powers to obtain dental records for victim identification without consent from the family.

Tragically in February 2009, 50 people died following the crash of Colgan Air flight 3407. The bodies of some of the victims were exposed to very high temperatures for almost 11 hours. As a consequence, conventional methods for victim identification could not be used. X-ray fluorescence was therefore employed to identify minute amounts of dental materials recovered from the bodies. This technique is based on interactions between X-rays, electron beams and the sample material and compared the 'spectral fingerprint' from branded dental materials with those held in a data library. Samples of AH-26[®] Root Canal Sealer, Venus[®] and Heliomolar resin composites were identified. Despite reservations with the use of product names (see recent correspondence in this Journal), such use allowed corroborative identification of victims. D0I: 10.1038/sj.bdj.2012.221

MANAGEMENT OF DENTAL INFECTIONS

A lingual abscess caused by Streptococcus intermedius

Harrington AT, Hsia JC et al. J Med Microbiol; doi: 10.1099/jmm.0.036913-0

An imperative to achieve drainage, although antimicrobial agents may also have a role.

Should this paper trouble the dentist? This is only the second case report in the literature that describes a member of the *Streptococcus milleri* group, specifically *Streptococcus intermedius*, as 'the sole causative agent in a tongue abscess'. Notwithstanding this, several germane points are made. Deep infections of the tongue are rare as it has a rich vascular network and a thick epithelium. However, if there is a suspicion of tongue infection, this should be treated without delay as such could compromise the airway. Achieving drainage was central to the management of this patient, as the causative bacterial species was shown subsequently to be resistant to clindamycin, the empirically prescribed antibiotic. Nevertheless, such agents may facilitate a more rapid and complete recovery in that they could reduce 'the overall bacteriological burden'. DOI: 10.1038/sj.bdj.2012.222

ORAL MALODOUR

Clinical trial of oral malodour treatment in patients with periodontal diseases

Pham TAV, Ueno M et al. J Periodontal Res 2011; 46: 722-729

The authors suggest that the focus for treatment for those patients with oral malodour who also have gingivitis, should be tongue hygiene. Yet for those with oral malodour and chronic periodontitis, the priority is to treat the periodontitis.

The aim of this study was to compare different treatment approaches for oral malodour. All subjects in this study had oral malodour and of these, 116 had gingivitis and 102 periodontitis. In this crossover design study, those with gingivitis were allocated to 1) a group that were first given instruction in tongue cleaning followed by periodontal treatment or, 2) a group that first received periodontal treatment and then tongue cleaning. A similar design was used for those subjects with periodontitis. So although the conclusions from this study would appear useful, there is no data showing that the baseline oral malodour values returned to those values before the crossover.

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