

# 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.

## PRESSURE OR DISUSE ATROPHY?

### Atrophy of the residual alveolar ridge following tooth loss in an historical population

Reich KM, Huber CD *et al. Oral Dis* 2011; **17**: 33–44

#### Atrophy of the jawbones occurred in the absence of prostheses.

In this study, examination of skeletons with and without teeth was used to ascertain if atrophy of the alveolar ridges occurred in the absence of prostheses. This paper also reported on the implications of any such alveolar degeneration, if present-day patients were to receive dental implants. The skeletal remains were unearthed during archaeological excavations of a 7th–8th century AD, Avarian cemetery in Vienna, Austria. In almost one half of specimens, there was atrophy in at least one jaw segment. If these and other observations were translated when caring for contemporary patients requesting implant placement, the authors suggest that ‘up to 75% of elderly patients require some kind of surgical pretreatment...’ and the mandibular canal was exposed in 16.7% of individuals over 61 years of age.

DOI: 10.1038/sj.bdj.2011.502

## EVIDENCE AND EXPERIENTIAL

### Traditional Chinese medicine and oral diseases: today and tomorrow

Zheng LW, Hua H *et al. Oral Dis* 2011; **17**: 7–12

#### As traditional Chinese medicine ‘is basically experience-based’, robust studies are required to determine if there is synergy between traditional Chinese medicine and evidence-based medicine.

Owing to ‘differences in language, philosophy and concept of diagnosis and treatment’, the basics of Chinese medicine are difficult to communicate with Western healthcare workers. This review focuses on five Chinese medicines: Liuwei Dihuang, Tripterygium glycosides, Stomatitis-healing granule, Zengshengping and Composite Taixian tablet. Zengshengping has been used to manage precancerous lesions, whereas the others, with varying efficacy, have been used to treat recurrent aphthous stomatitis, oral lichen planus and Sjögren’s syndrome. Some of these herbs are highly toxic. For example, Tripterygium glycosides can cause, among other conditions, bone marrow suppression and kidney failure. The authors concede that although they had originally intended to carry out a systematic review, they had to settle for a narrative review because of a paucity of high quality studies.

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## DENTAL HEALTH INEQUALITIES

### Socio-economic position, smoking, and plaque: a pathway to severe chronic periodontitis

Zini A, Sgan-Cohen HD *et al. J Clin Periodontol* 2011; **38**: 229–235

#### The authors cite others that argue ‘socioeconomic factors’, and not only health behaviour, should be addressed ‘in order to reduce health inequalities between and within populations’.

This cross-sectional study adopted a stratified random sampling method in order to recruit 254 Jewish adults (mean age = 38.6 years) living in Jerusalem. Conceptual (developed and based on published literature) multiple logistic regression, education, tobacco smoking, and plaque levels were ‘forced’ into the final model. The investigators found that a lower level of education ( $p = 0.012$ ), smoking ( $p = 0.027$  in the second model, but not significant in the final model) and a higher level of plaque ( $p < 0.02$ ) were associated with severe chronic periodontitis (SCP) when adjusted for other confounders. The authors’ suggest, possibly somewhat simplistically, that a low level of education is associated with ‘tobacco smoking and higher levels of plaque, and finally to SCP.’

DOI: 10.1038/sj.bdj.2011.504

## COST-EFFECTIVE TREATMENT

### Three-year clinical evaluation of cuspal coverage with combined composite–amalgam in endodontically-treated maxillary premolars

Shafiei F, Memarpour M *et al. Oper Dent* 2010; **35**–6: 599–604

#### The authors of this audit suggest that this ‘one-appointment combined restoration technique ... yielded clinically acceptable results...’

Thirty-six upper premolar teeth were restored using an open sandwich technique. This comprised first placing resin composite to restore the non-functional cusp, including the dental aesthetic, and then amalgam to replace the functional cusp. It is suggested that this order of placement allowed the amalgam to ‘intermix’ with the air-inhibited composite layer. All teeth had been root-treated with ‘relatively intact’ buccal and palatal cusps. There was no control group. At one, two and three year recalls, 33 teeth were evaluated using the well established US Public Health Service (USPHS) Guidelines. It is reported that this technique had a favourable outcome although about 10% of patients complained of tooth discolouration and sometimes the interface between the resin composite and amalgam was less than ideal.

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