

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.

'NO THERAPEUTIC VALUE'

The clinical relevance of microbiology specimens in orofacial abscesses of dental origin

Fowell C, Igbokwe B *et al.* *Ann R Coll Surg Engl* 2012; **94**: 490–492

Most patients had been discharged from hospital before the results of their antimicrobial susceptibility testing were available, and even when they were available, for none did the result change their antimicrobial therapy.

In this retrospective single-centre cohort study, clinical data pertaining to 79 patients admitted with orofacial abscesses were interrogated. Antimicrobial susceptibility testing was carried out on samples taken from three-quarters of these patients. Treatment comprised drainage combined with the empirical use of intravenous antibiotics (usually amoxicillin and metronidazole) and then as outpatients, oral antimicrobial therapy. Ninety percent of patients had been discharged before interim microbiology results were available (usually 3.25 days after specimen collection). Excluding salaries, the cost of antimicrobial susceptibility testing for one specimen is £25–£30. Although the authors suggest routine testing 'has no therapeutic value', they do state that such testing would be indicated for those patients with co-morbidities.

DOI: 10.1038/sj.bdj.2012.1061

VULNERABILITY OF PAIN – PAIN OF VULNERABILITY

Sleep bruxism increases the risk for painful temporomandibular disorder, depression and non-specific physical symptoms

Fernades G, Franco AL *et al.* *J Oral Rehabil* 2012; **39**: 538–544

Associations between sleep bruxism, TMD and depression.

Nevertheless, causation could not be established because the study design was cross-sectional and there was no control group. Additionally, the sample (n = 272) was biased in that it comprised only those who had sought treatment for TMD with 90% being women. The authors revisit the argument that there may be parallels between pain experienced by those with sleep bruxism and post-exercise muscle soreness. They also touch on the issue of 'the vulnerability of pain and the pain of vulnerability'. For example, do psychosocial disorders, including depression as revealed in this study by using RDC/TMD Axis II, 'predispose to this painful condition (TMD), or whether the pain itself causes these disorders (depression)'?

DOI: 10.1038/sj.bdj.2012.1062

HEALTHY EATING?

Implant overdentures and nutrition: a randomized controlled trial

Awad MA, Morais JA *et al.* *J Dent Res* 2012; **91**: 39–46

No improvement, if not a deterioration, in the nutrition of those subjects who had been restored with mandibular implant overdentures (IOD).

An elevated level of homocysteine (tHcy) can be associated with deficiencies in vitamins and is a risk factor for cardiovascular and other diseases. In this study, tHcy and secondary nutritional outcome measures were recorded in 255 (>65 years old) edentulous subjects at baseline, 6 and 12 months after they had been restored with either 1) an IOD and a conventional upper prosthesis, or 2) a conventional lower and an upper prosthesis. Those subjects restored with an IOD had fewer difficulties with masticatory function. Yet there was no change in tHcy and surprisingly, plasma folate and vitamin B12 actually declined over the study. The authors suggest that those restored with mandibular implant overdentures switched from drinking fortified beverages to eating healthy foods yet with lower levels of vitamins.

DOI: 10.1038/sj.bdj.2012.1063

AESTHETIC CROWNS

Reliability of reduced-thickness and thinly veneered lithium disilicate crowns

Silva NRFA, Bonfante EA *et al.* *J Dent Res* 2012; **91**: 305–310

Metal ceramic crowns would still be considered the 'gold standard'.

The step-stress method, fractography of *post mortem* specimens and Weibull modulus (that reflects the variability in strength of brittle materials) was calculated in order to examine the 'reliability' of different materials used to fabricate ceramic crowns. There was no difference between the Weibull characteristic failure loads of monolithic IPS e.max™ CAD crowns (1 mm thickness) and those veneered with fluorapatite ceramic. They also found that these lithium disilicate crowns had superior mechanical characteristics compared with zirconia crowns. Figure 3 contextualises some of the laboratory findings by showing a clinical photograph of the degradation of an e.max™ CAD crown. When considering zirconia crowns, it was reported that modifications to core/framework design has reduced veneer chipping. Nevertheless, such failure is still higher than that for metal ceramic crowns.

DOI: 10.1038/sj.bdj.2012.1064