

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 Dr Trevor Watts.

ENDODONTICS

Clinical and radiographic evaluation of one- and two-visit endodontic treatment of asymptomatic necrotic teeth with apical periodontitis: a randomized clinical trial

Molander A, Warfvinge J *et al.* *J Endodon* 2997; 33: 1145-1148

A 1-visit root canal treatment (RCT) with antimicrobial treatment appeared as effective as a 2-visit treatment.

A meta-analysis has shown no difference in outcome between 1 and 2 visit RCTs. In this Swedish study, RCT was performed for 101 teeth in 94 patients, randomising them to 1 or 2 visits. Microbial samples were taken.

After moderate drop-outs over 2 yrs of follow-up, 49 1-visit cases were compared with 40 2-visit cases. In the 1-visit group, 32 teeth were healed, 4 were not, and in 13 cases the result was uncertain. Respective 2 visit results were 30, 5 and 5. Pre-obturation microbial results did not significantly affect results, though there was a slight trend towards greater uncertainty of healing with positive results ($P = 0.12$).

DOI: 10.1038/bdj.2008.194

ORAL SURGERY

Age as a risk factor for third molar surgery complications

Chuang S-K, Perrott DH *et al.* *J Oral Maxillofac Surg* 2007; 65: 1685-1692

In a large number of subjects, dichotomised at 25 yrs, complications were more frequent in the older group.

Over a period of 1 yr, a survey was made of a prospective cohort of 4,004 patients (mean age 39.8 ± 13.6 yrs, 245 aged ≤ 25) in whom 8,748 M3s were removed.

There were 155 complications during surgery, and 654 subsequently. The commonest was alveolar osteitis (296) followed by inferior alveolar nerve injury (80). Logistic regression analyses showed that age >25 was associated with more complications (OR = 1.46, $P = 0.048$), and when age was grouped in deciles, only the 26-35 yr group was at significantly greater risk of complications (OR = 1.63, $P < 0.01$).

The authors note that although 20% of patients experienced a complication, relatively few of these were considered serious. The patient cohort also was treated by specialists, and therefore would include fewer cases perceived as straightforward by GDPs.

DOI: 10.1038/bdj.2008.196

ORAL SURGERY

Effectiveness of antibiotic prophylaxis in third molar surgery: a meta-analysis of randomized controlled trials

Ren Y-F, Malmstrom HS. *J Oral Maxillofac Surg* 2007; 65: 1909-1921

Systemic antibiotics given before treatment reduced levels of dry socket (alveolar osteitis: AO) and wound infection (WI) but NNTs were quite high.

There is a long-standing controversy over the need for antibiotics to prevent AO after surgical removal of third molars (M3s). After a search of the literature, 17 randomised trials were found suitable for meta-analysis, but 1 was eliminated. This left 2,932 patients in 10 trials using broad spectrum antibiotics, and 6 using antianaerobics such as metronidazole.

AO occurred in 84 of 1,350 treated patients and 228 of 1,582 controls (OR = 2.2; $P < 0.05$), and 13 patients needed to be treated to prevent 1 case. Respective figures for WI were 44 of 1,110, and 78 of 1,286 (OR = 1.8; $P < 0.05$), with NNT of 25. Preoperative doses were necessary to prevent AO, and needed to be continued 2-7 days to prevent WI. The authors suggest using a penicillin if prophylaxis is necessary.

DOI: 10.1038/bdj.2008.195

DENTAL PUBLIC HEALTH

Characteristics of publicly insured children with high dental expenses

Churchill SS, Williams BJ *et al.* *J Public Health Dent* 2007; 67: 199-207

More than half the total costs of dental treatment were accounted for by less than 10% of the children in a US state.

In the US state of Washington, Medicaid provides cover for paediatric dental care. Data for 1 $\frac{3}{4}$ yrs from 2002-2004 were investigated, including a questionnaire administered in 3 paediatric medical practices during an oral health promotion.

Data were available for 533 children, of whom 345 had received at least 1 dental procedure in the period. Total expenses ranged from \$13 to \$6,839. Most services were diagnostic and preventive. Less than \$250 was spent on each of 79% of the children, but 9% each required \$1,000 or more. The authors comment that in this social group, 27% were unaware that their children had dental coverage, and that such knowledge and early preventive care might reduce the treatment need considerably.

DOI: 10.1038/bdj.2008.197