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.

ORAL SURGERY

The relationship of cigarette smoking to postoperative complications from dental extractions among female inmates

Heng CH, Badner VM et al. Oral Surg 2007; 104: 757-762

Complications were more frequent in smokers.

Various factors have been associated with post-extraction complications. In a female prison of 1,400 inmates in Connecticut, extraction outcome was compared for the 8 months before and the 8 months after a ban on smoking introduced in September 2004.

In 69 smokers and 41 nonsmokers treated before the ban, complications were noted respectively in 19 and 4 (P =0.02). In 67 former smokers and 42 nonsmokers treated after the ban, complications were noted in 14 and 6 (NS). Complications were also more likely in mandibular 3rd molars (M3s), in surgical extractions and in smokers undergoing multiple extractions, especially before the ban. Alveolar osteitis (dry socket) specifically was increased in M3s, and in surgical extractions, but not in smokers.

DOI: 10.1038/sj.bdj.2008.405

PREVENTIVE DENTISTRY; ORTHODONTICS

Caries-preventive effectiveness of a fluoride varnish: a randomized controlled trial in adolescents with fixed orthodontic appliances

Stecksén-Blicks C, Renfors G et al. Caries Res 2007; 41: 455-459

Regular fluoride varnish application reduced the number of white spot lesions (WSLs).

Early enamel demineralisation adjacent to orthodontic brackets is frequent, and may affect the aesthetic result. This double-masked study randomly allocated 273 children of mean age 14.3 yrs and requiring a maxillary fixed appliance to active fluoride varnish application or placebo varnish. Varnish was applied at bonding and then at every visit (approximately 6 weekly).

At baseline, WSLs were present in 4.3% of the active group and 4.0% of the placebo group (NS), and at debonding, respectively in 11.7% and 29.7% (P <0.001). General absolute risk reduction (ARR) was therefore 18%, and the number needed to treat was 5.6 (NNT: reciprocal of ARR). The incidence of WSLs was reduced in incisors, canines and premolars. The authors recommend adoption of the varnish routinely in such patients. DOI: 10.1038/si.bdi.2008.406

IMPLANT DENTISTRY

The effectiveness of immediate, early, and conventional loading of dental implants: a Cochrane systematic review of randomized controlled clinical trials

Esposito M, Willings M et al. J Oral Maxillofac Implants 2007; 22: 893-904

There were no significant differences in outcome with the 3 approaches.

A load-free period of several months was originally advised to minimise implant failure. This review was limited to RCTs comparing loading within 1 week (immediate), between 1 week and 2 months (early), and after 2 months (conventional).

From 20 identified trials, 11 were included in the analysis: 6 of immediate v. conventional loading, 3 of early v. conventional, and 2 of immediate v. early. The immediately loaded implant total was 253, the early, 230, and the conventionally, 307.

No statistically significant differences were found between the 3 regimes for any of the parameters tested. The authors comment that all operators were highly experienced, and that a high degree of insertion torque (hence primary stability) seemed important for success of immediate and early loading. DOI: 10.1038/sj.bdj.2008.407

ONCOLOGY; EPIDEMIOLOGY

Oral tongue cancer in young patients: a matched analysis

Garavello W, Spreafico R et al. Oral Oncol 2007; 43: 894-897

Squamous cell carcinoma (SCC) of the tongue was worse in younger patients.

Studies have reported different conclusions on SCC prognosis in young subjects. The present study was limited to all patients with tongue SCC, without multiple sites or metastasis and with no previous treatment in an Italian medical school from 1981 to 1998. There were 46 aged 40 yrs or less (young) and 92 aged >40 yrs (old).

After treatment, local recurrence affected 39% young and 24% old patients, regional recurrence respectively 26% and 25%, and distant metastasis, 9% and 2%. At 5 yrs, disease-free survival was respectively 34% and 58%, and respective deaths were 50% and 34%. Survival was significantly less for young patients.

DOI: 10.1038/sj.bdj.2008.408