Abstracts on this page have been chosen and edited by Dr Trevor Watts

PERIODONTOLOGY; EPIDEMIOLOGY

Tobacco use and incidence of tooth loss among US male health professionals

Dietrich T, Maserejian NN *et al.* *J Dent Res* 2007; **86**: 373-377

There was a dose-related effect of smoking on tooth loss.

The effects of smoking on periodontal health are well-established, but data on dose related to tooth loss are sparse. This study examined longitudinal data from 51,529 US male health professionals (58% dentists) starting in 1986 (aged 40-75 yrs). Some 90% responded to questionnaires each 2 years, and in 2002, after exclusions, data were included from 43,112 subjects (61% dentists).

At baseline, 9% were current, and 44% former, smokers. In 2002, compared with never-smokers in a model with adjustment for numerous potential confounders, significant hazard ratios (HRs) for risk of tooth loss were respectively: for smokers who had quit 10+ yrs earlier, 1.2; 6-9 yrs, 1.5; 3-5 yrs, 1.6; 1-2 yrs, 1.9; and <1 yr, 2.6. In current smokers, significant HRs were respectively: for smoking 1-4 cigarettes/day, 1.4; 5-14, 1.9; 15-24, 2.3; 25-34, 2.7; 35-44, 2.9; and 45+, 3.0.

DOI: 10.1038/bdj.2007.684

PERIODONTICS

Coronally positioned flap for treatment of restored root surfaces: a 6-month clinical evaluation

Lucchesi JA, Santos VR *et al.* *J Periodontol* 2007; **78**: 615-623

Coronally positioned flap (CPF) achieved coverage over both glass ionomer (GIC) and microfilled composite resin (CR) restorations.

Where cervical lesions have been restored to prevent further tooth wear, evidence on root coverage to treat recession is limited. In this study, 59 subjects with comparable non-carious cervical lesions and Miller class I recession were randomised to treatment with CPF after root surface planing, GIC + CPF or CR + CPF. Subjects were healthy non-smokers. CPF was performed 2 weeks after GIC or CR.

Mean root coverages at 6 months for the 3 groups were respectively 81%, 72% and 74% (NS), and there were no statistically significant differences between groups at baseline, 3 months and 6 months in any clinical parameters. However, the authors discuss research indicating that restorative margins may take a long time to show adverse gingival effects.

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PREVENTIVE DENTISTRY

Effect of three different dental health preventive programmes on young adult individuals: a randomized, blinded, parallel group, controlled evaluation of oral hygiene behaviour on plaque and gingivitis

Hugoson A, Lundgren D *et al.* *J Clin Periodontol* 2007; **34**: 407-415

Preventive instruction was effective, but professional tooth cleaning did not affect results.

Dental disease may be reduced by various preventive approaches. In this 3 yr Swedish study of 400 patients aged 20-27 yrs from a public clinic and a private practice, they were randomised to 4 groups: controls; a personalised preventive programme for individuals at 2 month intervals with additional professional tooth cleaning for a random sub-group; another individual preventive programme; and the same programme given to groups of people.

The control group had significantly more gingivitis at 3 yrs, but differences between test groups were NS. Gingival health at baseline best predicted a healthy outcome. Participation in a preventive programme and knowledge of dental diseases were also predictors.

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BEHAVIOURAL SCIENCE; EPIDEMIOLOGY

Relationship between cognitive impairment and oral health: results of the Health 2000 Health Examination Survey in Finland

Syrjälä A-MH, Ylöstalo P *et al.* *Acta Odont Scand* 2007; **65**: 103-108

These patients had poorer dental conditions, but there may be several explanations for the association.

Impairment of cognitive health (CH) is increasing with longevity. This study investigated the relationship of CH and oral health (OH) in a nationally representative sample of 2,320 Finns aged 55+ yrs.

Subjects with good CH had significantly more teeth, less caries, fewer dentures, fewer denture problems and better denture hygiene. Those with moderate or severe CH impairment were 5 times more likely to have no teeth and no dentures.

The authors note that the association of poor CH and OH may relate to a lack of preventive measures, effects of medication, difficulties in treatment, levels of education and social networks. If OH is to improve in these patients, multifactorial support is needed.

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