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## PERIODONTICS

### Five-year results following treatment of intrabony defects with enamel matrix proteins and guided tissue regeneration

Sculean A, Donos N *et al.* *J Clin Periodontol* 2004; **31**: 545-549

**A modest 1-year difference between the outcomes of simple flap surgery (OFD) and surgery with enamel matrix derivative (EMD) disappeared by 5 years.**

In this study, 56 patients with single intrabony defects were randomly assigned to OFD, EMD, surgery with a guided tissue regeneration membrane (GTR), and combined EMD and GTR (COM). In these groups, 5 year follow-up was completed respectively for 10, 11, 11 and 10 patients. Respective mean baseline clinical attachment levels (CAL) were 9.7, 9.9, 9.9 and 9.8 mm, and probing depths (PD), 8.2, 8.2, 8.3 and 8.4 mm. Measurements were made blind with a first generation periodontal probe. One smoker was present in each group except COM, which had 2.

At 1 year, respective improvements in CAL were 1.6, 3.4, 3.2 and 3.0 mm, and in PD, 3.3, 4.6, 4.4, and 4.4 mm. Whilst these were all significant changes, only the differences between OFD and EMD reached statistical significance ( $P < 0.05$ ). At 5 years, respective changes in CAL from baseline were 1.3, 2.9, 2.7 and 2.6 mm, and in PD, 2.7, 4.3, 3.9, and 4.0 mm. No significant differences between groups were present. The authors interpret their 5 year results as similar for all treatment methods.

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## ONCOLOGY; ORAL ADVERSE EFFECTS

### Long-term effects of chemotherapy on orodental structures in children with non-Hodgkin's lymphoma

Oğuz A, Çetiner S *et al.* *Eur J Oral Sci* 2004; **112**: 8-11

**Chemotherapy for non-Hodgkin's lymphoma (NHL) may affect tooth formation.**

This study compared dental development malformations in 36 long-term survivors of childhood NHL and a matched control group of 36. The mean age at diagnosis of NHL was 7.1 yrs (range 3.2-15), and at the time of the dental assessment, 10 yrs (4.2-17.6). Chemotherapy had ceased 1 to 6.2 years earlier (mean 2.6).

The control group differed from the NHL group solely in having a lower mean Plaque Index (0.9 v. 1.49). Gingival Index and dmft/DMFT were similar. Enamel discoloration affected 67% of the NHL group, and 25% of the controls ( $P = 0.0001$ ). Root malformation was found respectively in 44% and 25% ( $P = 0.02$ ). There were no significant differences between groups in enamel defects, unerupted teeth, agenesis, premature apexification and microdontia, nor between children over and under the age of 5 yrs at NHL diagnosis.

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## BEHAVIOURAL SCIENCE; ORAL HABITS

### Reported bruxism and biopsychosocial symptoms: a longitudinal study

Ahlberg J, Savolainen A *et al.* *Community Dent Oral Epidemiol* 2004; **32**: 307-311

**Smoking cessation may be needed to manage temporomandibular disorders (TMDs).**

Two main types of aetiology have been proposed to account for bruxism: peripheral morphological factors (such as occlusal discrepancies), and central factors (such as stress and dopaminergic system disorders). In 1999, 1339 employees of the Finnish Broadcasting Company completed a questionnaire on tobacco use, bruxism and symptoms of TMD. In 2000, 205 out of a random sample of 1/5 of the original group (response rate 76%) completed a follow-up questionnaire on the same topics, giving a report of perceptions over a 24 month period.

On the basis of their reports, subjects were categorized as low bruxism ( $n = 131$ ) and high bruxism (74) individuals. Smokers constituted 24% and 43% of these respective groups. In a multivariate model including affective disturbance, sleep disturbance, somatic symptoms, gender, and age, 3 other variables achieved significance in explaining high levels of bruxism: pain symptoms, TMD painless symptoms and smoking. The authors conclude that successful management of TMD requires the inclusion of smoking cessation.

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## PROSTHODONTICS

### What do patients expect from complete dentures?

Smith PW, McCord JF *J Dent* 2004; **32**: 3-7

**Provision of more information for patients is advisable prior to the construction of complete dentures.**

In this study, 125 complete denture patients treated in 2 general practices (GDP) and 89 treated in a dental hospital (DH) answered a questionnaire on important complete denture features which had been developed with a pilot group of 10 such patients. Subjects were asked whether they considered these features to be essential or merely desirable. A further question asked whether subjects would like further information on denture construction and care of dentures and the mouth.

Significantly fewer GDP patients considered 'no pain', 'no slackness' and a 'good bite' to be essential, but at least 4/5 of both groups felt that 'easy to chew', 'good appearance' and 'speech unaffected' to be essential. The characteristic 'good bite' was incorporated in the questionnaire as a result of the pilot, but it was not certain what patients understood by the term. The authors considered that treatment planning should take into account the different expectations of GDP and DH patients, and asked whether DH expectations played a part in referral.

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