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PERIODONTICS

Favorable periodontal regenerative outcomes from teeth with presurgical mobility: a retrospective study

Trejo PM, Weltman RL *J Periodontol* 2004; **75**: 1532–1538

There was no difference in outcome for teeth with limited hypermobility.

Some studies have suggested that tooth hypermobility (TM) may adversely affect periodontal surgical outcome, and others, that it may not. Data were examined from 3 randomised double masked (double blind) parallel group trials of regenerative materials, including barrier membranes, bone allograft and enamel matrix derivative. After exclusion of 26 subjects, most of whom had no TM records, data from 64 patients each with a single treated defect were examined.

In 36 subjects with Miller TM scores of 0, mean probing depth (PD) reduced from 7.7 to 4.0 mm and clinical attachment level (CAL) from 7.6 to 4.9 mm. In 13 with TM scores of 1, respective reductions were from 6.5 to 3.7 mm and from 7.5 to 5.5 mm, and in 15 with scores of 2, from 7.7 to 4.0 mm and from 9.0 to 6.6 mm. ANOVA of between group differences gave $P = 0.21$ for PD and $P = 0.25$ for CAL.

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PHARMACOLOGY; PERIODONTICS

Effect of alendronate on periodontal disease in postmenopausal women: a randomized placebo-controlled trial

Rocha ML, Malacara JM *et al. J Periodontol* 2004; **75**: 1579–1585

Treatment of periodontitis in postmenopausal women resulted in greater improvements for those taking alendronate.

Research has suggested that postmenopausal osteoporosis is associated with increased alveolar bone loss and periodontitis. Low oestrogen levels may increase local bone-active cytokines. Alendronate is a bisphosphonate used to treat osteoporosis by reducing osteoclast activity. Periodontitis was treated nonsurgically in 40 postmenopausal women of mean age 58 yrs, with random allocation to alendronate or placebo for 6 months in a double masked (double blind) trial.

Reduction in control mean PD over the trial was from 3.1 to 2.7 mm, and in the active group, from 3.2 to 2.4 mm. This difference was significant, as was an increase of 0.4 mm in active group alveolar bone height compared with a reduction of 0.6 mm in the controls. Differences in attachment level were not significant. A sub-analysis in obese and non-obese patients (numbers not stated) suggested that this factor did not affect periodontal outcome, though obesity is associated with reduced osteoporosis.

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BEHAVIOURAL SCIENCE

Dental fear in adults: a meta-analysis of behavioral interventions

Kvale G, Berggren U *et al. Community Dent Oral Epidemiol* 2004; **32**: 250–264

Behavioural interventions seem to have a useful effect on dental fear.

There is evidence that dental fear can be reduced with a variety of experimental interventions, and perhaps up to 80% of such patients may become amenable to normal dental treatment. However, it is not clear whether such interventions will routinely reduce anxiety and result in improved dental attendance.

In the present study, a literature search identified 80 studies of behavioural treatment of dental fear. In 38 studies, entry criteria were met for inclusion in the meta-analysis. Most of these were either in specialised clinics for dental fear patients or based on PhD theses. Most studies used a mixed intervention approach.

Effect size (ES) for self-reported dental fear was 1.78 (95% CIs: 1.7–1.9). In 36 studies, positive change was identified, and in 2, no change. Mean overall ES was 1.4 (1.3–1.6) for dental attendance within 6 months, and 1.17 (0.99–1.35) for dental visits between 6 months and 4 yrs. There was considerable heterogeneity. The authors note that most studies showed anxiety reduction with behavioural treatments, and none reported the opposite.

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ORAL MEDICINE

Risk indicators for oral candidiasis and oral hairy leukoplakia in HIV-infected adults

Chattopadhyay A, Caplan DJ *et al. Community Dent Oral Epidemiol* 2005; **33**: 35–44

In this population, a low CD4+ count was a significant risk factor for both conditions, and smoking increased the risk of oral candidiasis.

Oral candidiasis (OC) and oral hairy leukoplakia (OHL: an Epstein-Barr virus infection) are common markers of HIV infection, and both may be reduced by highly active antiretroviral treatment (HAART). This study examined 631 patients treated between 1995 and 2000, when HAART was increasing.

Following logistic regression analysis, the odds ratio for OC infection was 12.7 (95% CIs: 4.9–32.9) for subjects with CD4+ counts below 200 cells/μl, 0.6 (0.3–0.9) for combination antiretroviral therapy, and 2.5 (1.3–4.8) for current smoking. Significant ORs >1 for OHL were identified for CD4+ counts below 200 cells/μl, male gender, antifungal medication and drug usage, but not for antiretroviral therapy. The authors emphasise the useful effect of antiretrovirals on OC and the importance of the CD4+ count as a risk factor for both conditions.

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