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PERIODONTICS

Treatment of intrabony defects with enamel matrix proteins or barrier membranes: results from a multicenter practice-based clinical trial

Sanz M, Tonetti MS *et al.* *J Periodontol* 2004; **75**: 726-733

Results were similar for both methods of regenerative periodontal treatment.

In 3 countries, 75 patients with severe periodontitis were randomised to periodontal papilla preservation flap surgery with the adjunct of either guided tissue regeneration using a resorbable membrane (GTR) or application of enamel matrix derivative (EMD). Heavy smokers (20+ cigarettes per day) were excluded. There were 8 drop-outs and 35 EMD subjects were compared with 32 GTR subjects.

One year after treatment, mean PD of EMD sites reduced from 7.9 to 4.1 mm, and mean clinical AL from 9.5 to 6.4 mm. For GTR, respective figures were 8 to 5.7 mm and 9.7 to 7.2 mm. The differences between treatments were not statistically significant. However, GTR had a 100% complication rate, but EMD only 6% ($P < 0.0001$). The authors comment that GTR had a lesser effect than previous evidence suggested, and this was probably due to the high prevalence of complications.

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ORTHODONTICS; PERIODONTICS

Reconstruction of the maxillary midline papilla following a combined orthodontic-periodontic treatment in adult periodontal patients

Cardaropoli D, Re S *et al.* *J Clin Periodontol* 2004; **31**: 79-84

Orthodontic intrusion of extruded upper central incisors after flap surgery led to improvements in aesthetics and supporting tissues.

Upper central incisor migration in advanced periodontitis usually has components of extrusion and proclination. In this study, 28 patients with a migrated and overerupted upper central incisor were given thorough initial nonsurgical treatment, followed by flap surgery without augmentation or regenerative adjuncts. Fixed orthodontic appliances were placed 7-10 days later to realign and intrude the migrated incisors.

Treatment reduced mean PD from 6.8 to 2.5 mm, and mean clinical AL from 9.2 to 3.3 mm, with further respective changes to 2.6 and 3.5 mm at the 1 yr follow-up. The shape of the interdental papilla between the central incisors was also improved. The form of the central incisors had no significant effect on treatment outcome.

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TOOTH LOSS; SOCIOLOGY

How do age and tooth loss affect oral health impacts and quality of life? A study comparing two national samples

Steele JG, Sanders AE *et al.* *Community Dent Oral Epidemiol* 2004; **32**: 107-114

In UK and Australia, quality of life (QoL) was associated with age and number of teeth.

One of the main justifications for dental care is the effect it may have on QoL. This study examined data from 3662 dentate subjects in the 1998 UK Adult Dental Health Survey and 3406 in the 1999 Australian National Dental Telephone Survey.

Mean scores on the simplified Oral Health Impact Profile (OHIP-14) indicated better QoL for the UK subjects (5.1) than the Australians (7.4). In both countries, OHIP-14 scores decreased with decreasing numbers of teeth ($P < 0.001$ by multivariate ANOVA). There were also significant relationships of OHIP-14 with age group (older had lower scores), denture wearing and location within the countries.

In both countries, OHIP-14 scores were significantly better for subjects with 25+ teeth. The worst scores in UK were in subjects with <17 natural teeth, and in Australia, those with <21 teeth. In both countries, subjects aged 70+ had significantly better OHIP-14 scores than all other groups. In the 11% of Australians who had been born in the British Isles, findings were similar to those of the UK subjects.

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CARIOLOGY

Early childhood caries in children aged 6-19 months

Vachirarojpisarn T, Shinada K *et al.* *Community Dent Oral Epidemiol* 2004; **32**: 133-142

Early childhood caries (ECC) is a significant problem in Thailand.

Thailand has a significant problem of primary tooth caries. In 2001, 66% of 3-yr-olds had caries, with mean dmft of 3.6. This study investigated 520 younger children in an area where the mean dmft of this age group was 5.1.

Non-cavitated caries appeared at 9 months in some incisors erupting at 6-8 months, and cavitated caries at 9-10 months. Caries appeared in some molars as soon as they erupted in 15 to 19-month-old children. Prevalence of ECC was 21% in 9 to 10-month-olds, 58% in 11 to 14-month-olds and 83% in 15 to 19-month-olds.

Although the study explored snacking, this factor did not reach a significant association with ECC, nor did cleaning method or fluoride toothpaste usage. There were significant relationships between ECC and: mother's DT (but not DMFT), lower income, breast feeding rather than bottle or mixed feeding, and a high level of mutans streptococci. The authors recommend a thorough programme of preventive care at an early age.

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