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ENDODONTICS; PERIODONTICS

Bone level around endodontically treated teeth in periodontitis patients

Timmerman MF, Van der Weijden VA *J Clin Periodontol* 2006; **33**: 620-625

There was more bone loss around teeth which had been root treated.

Previous studies have suggested that endodontic lesions may sometimes have adverse periodontal consequences. In 286 consecutive patients in a Dutch periodontal practice, 67 sets of radiographs were identified where root-filled teeth had contralateral teeth without evidence of pulpal pathology. Altogether, 108 pairs of teeth were found, and in 38 pairs, a post had been provided after root filling.

In root-filled teeth without posts, mesial and distal mean bone levels were 4.2 mm and 4.5 mm, compared with levels of 3.5 mm ($P < 0.01$) and 3.9 mm ($P < 0.01$) on controls. In teeth with posts, mesial and distal levels were both 4.3 mm, compared with mesial 3.3 mm ($P < 0.01$) and distal 4.0 mm (NS) on controls. On 30 teeth with furcations, inter-radicular radiolucencies were significantly commoner in root-filled teeth (28 v. 21). The authors discuss mechanisms by which endodontic involvement or root-treatment may affect alveolar bone.

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BEHAVIOURAL SCIENCE; DENTAL HEALTH

Dental attitudes: proximal basis for oral health disparities in adults

Riley JL III, Gilbert GH *et al. Community Dent Oral Epidemiol* 2006; **34**: 289-298

There appears to be a link between attitude and experience of dental disease.

Behavioural factors are heavily involved in common oral diseases. In a longitudinal dental care study in Florida, 839 of 873 subjects gave full interview data at baseline; at 24 months, 739 remained in the study, and 723 were examined. Four clusters were identified by analysis of attitude and beliefs: favourable attitudes toward dentists and dental care (C1; $n = 351$), frustrated believers in dental care (C2; 101), negative attitudes about dentists and cost concerns (C3; 214), and pessimistic about personal and professional oral care (C4; 173).

There were significant socioeconomic differences between groups, but different race, gender, age and education levels were represented in them all. Race and educational status were the best sociological discriminators between groups. The best overall dental health was found in C1 with the worst in C3. From baseline to 24 months, C3 showed the least preventive care and the greatest increase in oral disease. The authors consider that the nature of the groups identified may help explain some of the differences in oral health.

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RADIOLOGY; ADVERSE EFFECTS

Taste loss and recovery following radiation therapy

Sandow PL, Hejrat-Yazdi M *et al. J Dent Res* 2006; **85**: 608-611

Radiation-induced taste loss may return within 6 months.

Post-irradiation gustatory dysfunction may occur within 3 days of starting radiotherapy, and taste bud degeneration within 1 week. The present 1 yr study followed 13 oral cancer patients (P) who had received irradiation of at least 2/3 of the tongue and one parotid gland, and 5 healthy adults of similar age as controls (C).

At baseline, there were no differences between P and C groups for taste thresholds, using sucrose, saline, quinine and citric acid solutions of increasing strength. At 1 month, which was during radiotherapy, all P group thresholds were substantially elevated but returned to normal at 6 and 12 months. The threshold increases at 1 month were 6-fold for sour, 13-fold for salt and sweet, and 107-fold for bitter. The authors comment that the recovery of taste indicated that radiation damage occurred in the taste cells and not in the nerve fibres.

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ORAL MEDICINE; PHARMACOLOGY

Xerostomia and medications among 32-year-olds

Thomson WM, Poulton R *et al. Acta Odont Scand* 2006; **64**: 249-254

Approximately 10% reported this symptom.

Most research on xerostomia has been in older people. Recent Swedish estimates suggest up to 20% of young adults may experience it. The present study investigated a New Zealand cohort of 1,037 people born in 1972-3 and followed up in 10 subsequent examinations so far. At age 32 yrs, 972 of the 1,015 subjects still living were examined, and dry mouth and medication data were available for 950. Data from ages 26 and 32 yrs were used in this study.

In 308 subjects taking 2 or more medications, 15% reported xerostomia; in 302 taking one medication, 11% reported it, and in 340 taking no medication, 5%. Chronic medical conditions were reported by 11.5% of subjects. Regression analysis gave significant ORs for xerostomia at age 32 yrs of 4.7 for antidepressant medication, 4.1 for iron supplements, 2.4 for narcotic analgesics, and 2.3 for the number of medical conditions reported. However, out of the medications taken at both ages 26 and 32, only antidepressants reached significance (OR = 22.4), along with the number of medical conditions (2.4). The authors discuss their findings and note that the associations might be a result of the conditions treated rather than the medication.

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