

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

Oral pathology

A clinical study of oral tori in southern Thailand: prevalence and the relation to parafunctional activity

Kerdpon D, Sirirungrojying S
Eur J Oral Sci 1999; 107: 9-13

Patients with torus mandibularis were 25 times as likely to have definite parafunctional activity.

Previous investigators have suggested that torus mandibularis (TM) may have environmental as well as developmental origins. In a Thai dental hospital, 609 consecutive patients were examined for tori and parafunctional behaviour. An interview and examination sought to identify the presence of clenching or grinding in the dentition, and patients were subsequently examined for TM and torus palatinus (TP).

TM was present in 182 subjects and TP in 376. The prevalence of tori was similar in male ($n = 183$) and female (426) subjects. TP was approximately equally distributed in subjects with and without parafunction, but 125 out of 182 subjects with TM had definite parafunctional activity, whereas 378 out of 427 without TM did not show this behaviour. The odds ratio for parafunction associated with TM was 25.3, but the size of the TM did not reach a significant association with the behaviour.

Preventive dentistry

Caries-preventive methods used for children and adolescents in Denmark, Iceland, Norway and Sweden

Källestål C, Wang NJ et al.
Community Dent Oral Epidemiol 1999; 27: 144-151

Despite different national approaches to caries prevention strategy, these countries have similar levels of child dental health

Denmark, Norway, Sweden and more recently, Iceland, have all experienced a similar caries decline since 1970. Random samples of dentists, hygienists and dental nurses in these countries were approached for information on preferred preventive strategies. Response rates varied from 60–70%.

Oral hygiene education was given to 75–98% of children and adolescents, with dietary advice to 45–69%, in the four countries. Fluoride advice was given least in Denmark and Iceland, and most in Norway. Fluoride toothpaste was recommended by the vast majority of all dentists, but fluoride tablets were recommended most in Norway, and least in Denmark. Fluoride rinses were recommended by many dentists in Iceland, but much less in the other countries.

The authors point to the disagreement which exists over relative efficiency of different preventive methods, and suggest that consensus would be useful in the interests of cost-containment.

Preventive dentistry

The influence of toothbrushing frequency and post-brushing rinsing on caries experience in a caries clinical trial

Chestnutt IG, Schäfer F et al.
Community Dent Oral Epidemiol 1998; 26: 406-411

For the best effect, fluoride toothpaste should be used more than once daily, and any rinsing with water should be minimal.

Following a 3-year clinical trial of a fluoride dentifrice, interview and computer questionnaire data were examined for 2621 participants aged a mean 12.5 years at the outset, to show the effects of toothbrushing frequency and rinsing afterwards.

In 341 subjects reporting <1 daily brushing, baseline DMFS was 9.7; in 734 reporting 1, it was 8.1; and in 1415 reporting >1, it was 7.6. Respective 3 year increments were 8.9, 6.6 and 5.5.

Multivariate statistical analysis including rinsing method showed a further significant difference between those who reported rinsing with a beaker of water for at least 2 of the 3 trial years, and those who reported it once or did not use this method (respective DMFS increments: 6.8 and 5.8). Other compared options were: water in cupped hands, mouth under tap, and water on toothbrush.

Oral pathology; oral medicine

Oral health status of southern Chinese following head and neck irradiation therapy for nasopharyngeal carcinoma

Schwarz E, Chiu GKC et al.
J Dent 1999; 27: 21-28

Root caries and candidal infection were the main problems identified in this group of patients.

A detailed oral examination was made in 33 patients of mean age 53 years, who had completed radiotherapy for nasopharyngeal carcinoma a mean of 3.6 years previously. Subjects had received a mean 6750 cGy of irradiation. All patients had xerostomia, and pH and buffering capacity of saliva were low.

Five subjects were caries-free. Mean DMFT was 8.03, and 19 subjects had active root caries lesions. Candidal infection was diagnosed in 14 subjects, mainly on the tongue. There was a high level of *Str mutans* and *Lactobacillus* carriage. When compared with epidemiological findings for Hong Kong patients, the DT component of DMFT was relatively high, and root caries was also significantly increased.

No association was found between periodontal disease and radiotherapy, but this study did not differentiate between teeth in the line of the beam and those outside it, where a difference was found in one recent study (Epstein *et al.*, *Oral Surg* 1998; 86: 673-677).