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PREVENTIVE DENTISTRY; DENTIFRICES

Systematic review of studies comparing the anti-caries efficacy of children's toothpaste containing 600 ppm of fluoride or less with high fluoride toothpastes of 1,000 ppm or above

Ammari AB, Bloch-Zupan A *et al.* *Caries Res* 2003; **37**: 85-92

Lower fluoride concentrations gave less protection against caries.

Excessive consumption of fluoride may result in fluorosis. Most dentifrices contain about 1000 ppm F⁻, and there has been some interest in lower concentrations. A search over 35 years of literature identified 8 comparative trials of low and high fluoride toothpastes, 7 of which had a satisfactory Jadad score for quality.

All reported water levels of F⁻ were below 0.2 ppm. DFS caries increment varied from 3.2 over 24 months to 10.9 over 36 months for 1000 ppm dentifrices; for 250 ppm pastes respective figures were 3.7 and 12.7.

Only 2 individual trials reported significant differences between pastes, but when meta-analysed, 1000 ppm monofluorophosphate dentifrices gave a weighted mean DFS 0.6 less than 250 ppm ($P = 0.002$) and DFT 0.33 less ($P = 0.004$). NaF dentifrices gave similar results. There were insufficient data for meta-analysis of 500 ppm dentifrices. The authors consider the number of adequate trials small and recommend further studies.

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ONCOLOGY

Soft tissue sarcoma of the head and neck region in adults

Pandey M, Chandramohan K *Int J Oral Maxillofac Surg* 2003; **32**: 43-48

Overall survival at 5 years was 80% despite a lower disease-free survival rate.

This study reported details of 22 soft tissue sarcomata (STS) treated over a 12 yr period in a regional cancer centre in India. In 3 cases each, rhabdomyosarcoma or malignant fibrohistiocytoma was diagnosed, and in 2 cases each, malignant schwannoma, angiosarcoma, liposarcoma or pleomorphic sarcoma.

Treatment was with thorough surgery in all cases, and adjuvant radiotherapy and/or chemotherapy in 14 cases. After a median follow-up of 14.5 months, 9 patients were alive and disease-free. Disease-free 5-yr survival was calculated as 24%. Smaller tumours, short duration of symptoms and low or intermediate histopathological grade gave better survival.

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DIETETICS; REMOVABLE PROSTHODONTICS

Association of edentulism and diet and nutrition in US adults

Nowjack-Raymer RE, Sheiham A *J Dent Res* 2003; **82**: 123-126

Intake of fibre and some vitamins were lower in complete denture wearers.

Little is known about how dental status affects intake of nutritious food. This study used data from the large US NHANES III epidemiological survey. In subjects aged 25 yrs and above, 1373 wore complete dentures (CD group) and 2421 were fully dentate. The CD group was older (65 v. 38 yrs), and more were female, non-Hispanic smokers or used food supplement preparations.

Mean intakes of carrots, tossed salad and dietary fibre, adjusted for demographic variables, smoking, caloric intake and supplement use, were significantly lower for the CD group. In similarly adjusted biochemical serum analyses for slightly smaller groups, the CD group also had significantly lower beta carotene, folate and vitamin C.

The authors comment that studies in edentulous subjects provided with implant-supported prostheses have not shown dietary improvement, and suggest that other approaches therefore may be needed to achieve this.

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PRIMARY ACUTE DENTAL CARE

Dental care of a child in pain – a comparison of treatment planning options offered by GDPs in California and the North-west of England

Blinkhorn A, Sadeh-Kabir R *Int J Paediatr Dent* 2003; **13**: 165-171

There were major differences in management of this problem.

In this study, 139 GDPs in Los Angeles were compared with 117 GDPs in the North-west of England (response rate 84%). Questionnaires asked for the practitioners' responses to a scenario of a 5 year-old anxious child with pain in a carious lower right first deciduous molar and caries in 4 other teeth.

Immediate care was similar in respect of drainage and antibiotic prescription, but US dentists were 5× as likely to take a radiograph, twice as likely to offer root treatment, or extraction, and 21× as likely to place a space maintainer. UK dentists were 11× as likely to use GA for extraction.

In respect of follow-up, UK dentists were 28× as likely to extract all first primary molars and 7× as likely to refer to a specialist. US dentists were twice as likely to consider restorations, and 26× as likely to recommend a Ni-Cr crown. In respect of longer term care, UK dentists were significantly more likely to give dietary advice but less likely to use fluoride varnish.

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