ABSTRACTS

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

ONCOLOGY

Survival in patients under 45 years with squamous cell carcinoma of the oral tongue

Manuel S, Raghavan SKN *et al.* *Int J Oral Maxillofac Surg* 2003; **32:** 167-173

Outcome at 5 years is similar to that in older patients.

There are limited data on oral squamous cell carcinoma (SCC) in younger patients, partly because it is rare. Some researchers have suggested that it carries a poorer prognosis in the young. This Indian study was a retrospective analysis of data from 76 subjects (mean age 38 yrs, range 20-45) with proven SCC. The commonest site was lateral border of the tongue (80%). Treatment was primarily surgical in 53% with adjuvant radiotherapy for 2/3, and primarily radiotherapy in the remainder with subsequent salvage surgery in all cases.

The 5 year overall survival (OS) was 78%, and 57% were disease-free (DF) at this time. The main factors reducing OS were a more advanced clinical stage and positive resection margins. DF survival was reduced by several surgical parameters. The histological grade of the primary tumour was unrelated to OS or DF survival. The authors comment that SCC status and nature of treatment are the main factors affecting outcome, regardless of age.

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PREVENTIVE DENTISTRY

Increased preventive practices lead to greater tooth retention

Kressin NR, Boehmer U *et al.* *J Dent Res* 2003; **82:** 223-227

Following US national recommendations on personal prevention leads to better oral health.

In the US, the ADA and the Surgeon General have recommended that individuals brush twice and floss once daily, and have regular prophylaxis visits. The desired outcome is to maximize tooth retention, but there is little research on whether this is achieved.

This study considered data from 736 dentate men (mean age 48 yrs, range 28-80) examined 3-yearly from 1969. The first 4 cycles (13 yrs) were examined as predictors of the clinical data over 26 yrs. Initially, participants had a mean of 24 teeth, 72% had education beyond high school, 20% smoked, 55% brushed once and 43% twice daily, 38% flossed, 85% had regular prophylaxis treatment, and 8% had a denture.

Consistently good oral health behaviour over the 13 yrs was related to less tooth loss. Of a mean 24 teeth per subject, 13% were lost over the study period. A significantly increased relative risk for tooth loss occurred with smoking (1.92 for a pack per day), and reduced risk with brushing (0.51), brushing & flossing (0.44), and brushing, flossing & prophylaxis (0.33).

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PAEDIATRIC DENTISTRY

Vital pulpotomy in the primary dentition: attitudes and practices of specialists in paediatric dentistry practising in the United Kingdom

Hunter ML, Hunter B *Int J Paediatr Dent* 2003; **13:** 246-250

Most specialists adhere to UK guidelines, but more than half expressed concern about the medicament.

There are few data on paediatric endodontic practice, and vital pulpotomy is controversial. Questionnaires were sent to 221 paedodontists on the UK specialist register, and 87% were returned. Vital pulpotomy was used by 97% of respondents, and about 2/3 used as their preferred medicament formocresol in 1:5 dilution; others used full strength formocresol, calcium hydroxide, paraformaldehyde, ferric sulfate or other medicaments.

Routine preoperative radiographs were taken by 77% and postoperative ones by 60%; rubber dam was used routinely by 63%; the authors recommend all these procedures. Over half the respondents continued to use the medicament they had been shown as undergraduates. Some 54% had concerns about the possible side-effects of formocresol and formaldehyde, and were considering changing to other medicaments. The authors recommend research in this field.

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PREVENTIVE DENTISTRY

Fluoride, beverages and dental caries in the primary dentition

Levy SM, Warren JJ *et al.* *Caries Res* 2003; **37:** 157-165

Fluoride, milk and early frequent brushing can protect against caries.

Primary dentition caries has several known risk factors. In this study, fluoride and dietary data were recorded for 291 children at intervals from 6 wks to 4 years, and the children were examined for caries at 4-6 yrs. Subjects were predominantly white and of high socioeconomic status. Breast milk and infant formula intakes were not recorded.

Logistic regression identified several significant odds ratios for the presence of caries: at 36-48 months, frequency of toothbrushing (0.7), water consumption (0.57) and milk consumption (0.69); and from 6 weeks-12 months, consumption of sugar beverages or milk (1.7).

The model gave an AUC (the area under the receiver operating characteristic curve) of 0.69, indicating the probability of correctly discerning a subject having caries. The authors note that more risk factors are possible, including other sources of sugar and the individual oral microflora.

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