

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

Oral surgery; behavioural science

## Preliminary study of the impact of loss of part of the face and its prosthetic restoration

**Newton JT, Fiske J et al.**  
**J Prosthet Dent 1999; 82: 585-590**

Facial tissue loss and subsequent prostheses caused patients more concern about personal relationships than about prosthesis function.

Nine patients aged 16-74 yrs (out of 11 approached) who had received prosthetic treatment for facial deformities were interviewed regarding their reactions and feelings. In 5 patients, tumour surgery accounted for the loss of tissue, and in 2 cases each, trauma or congenital defects.

The interviewer was allowed freedom to follow the respondent's concerns effectively. Interviews lasted 40-90 min, and 2 researchers independently analysed tape recordings for emerging themes. Subjects had developed a way of explaining the problem to others, and 4 (all men) used jokes as a coping strategy. One smoker also had created an alternative explanation for his tumour.

The commonest response of other people was staring, which respondents considered more acceptable from children than adults. Where disease had led to the loss, 4 reacted with relief that their lives had been saved, but one was angry at the amount of tissue lost. Most problems were aesthetic, and several patients reported relationship adjustments and pressures arising in the workplace.

Cariology

## Dental caries, sugar-eating habits and toothbrushing in groups of 4-year-old-children 1967-1997 in the city of Umeå, Sweden

**Stecksén-Blicks C, Borssén E**  
**Caries Res 1999; 33: 409-414**

Caries has declined in children of Swedish background, but immigrant children had significantly higher caries prevalence in 1997.

Cross-sectional studies of these children have been used to monitor the caries level in relation to preventive advice since 1967 when mean dmfs was 7.8. Subsequently, parents were offered advice to encourage fluoride toothpaste use and dietary sugar restriction.

The Swedish population has become more aware of how caries may be prevented. However, the proportion of children in Umeå from immigrant backgrounds has increased, to 6% in 1992 and 10% in 1997. In 1997, all 268 children born in the fourth quarter of 1993 were invited to attend and the response rate was 77%. Mean dmfs after 1967 declined, to 4.5 in 1971, 2.9 in 1976, 2.0 in 1980 and 1987, and 1.8 in 1992. In 1997, it rose to 2.0, but this figure covered dmfs scores of 1.7 for children of Swedish origin and 3.9 for those from other ethnic backgrounds ( $P < 0.001$ ).

Comparison of data in a subgroup of 103 who were examined at

age 2 showed that 15 children who subsequently received advice and reduced a high sugar consumption had low dmfs at age 4, and 29 of 57 who (without advice of any kind) increased low sugar consumption had a higher dmfs comparable to 31 who had high sugar intake at both ages (ANOVA:  $P < 0.05$ ). The authors consider the individual parental education programme to be effective and to need reinforcement for children beyond the age of 2.

Orthodontics; sociology

## Socio-economic status and orthodontic treatment need

**Tickle M, Kay EJ et al.**  
**Community Dent Oral Epidemiol 1999; 27: 413-418**

Normative need for treatment was lower in children of affluent parents and vice-versa, but normative need did not agree with the self-perceived need of these children.

From a sample of 7,888 14-year-old children examined in an NHS survey in the north-west of England in 1994-5, a total of 5,918 (75%) were included in this study. Those included had full examination data, no history of past or current orthodontic treatment, and had answered a questionnaire concerning perception of their need for orthodontic treatment. Subjects' socio-economic status was ascertained on a 5 point scale using a marketing classification.

Normative need for orthodontic treatment (IOTN 4 & 5) was greatest (29%) in the children of lowest socio-economic status and least (22%) in the most affluent group. Further analysis showed that the difference was still present when a higher uptake of treatment among the more affluent children was taken into account. In a subgroup of 2,019 children who thought they needed treatment, only 42% had a normative need; among a total of 1,548 with a normative need for treatment, only 54% perceived their need; these findings were independent of socio-economic status.

Orthodontics; anaesthetics

## Long-term effect of neonatal endotracheal intubation on palatal form and symmetry in 8-11-year-old children

**Macey-Dare LV, Moles DR et al.**  
**Eur J Orthod 1999; 21: 703-710**

A group of premature and low birthweight (PLB) children, who had experienced over 2 weeks' mean oral intubation, showed a palatal form different to matched non-intubated healthy birth controls one decade later.

This study compared 43 PLB subjects intubated as neonates with 50 normal controls matched for age and gender and selected from a school in the county of the neonatal unit, at an average age of 10 yrs. Study models were made for precise measurement.

Both groups were similar for skeletal and incisor relationships. Palatal width at the positions of the second deciduous and first permanent molars was 2-3 mm greater in controls, and in PLB children the left side of the palate was significantly wider than the right in these positions. In the incisor region, PLB children had significantly steeper vaults. The consistency and asymmetry of the findings suggest that other differences in PLB children are unlikely to account for palatal shape.