#### **SUMMARIES** abstracts

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

# Comparison of different approaches of interdental oral hygiene: interdental brushes versus dental floss

Christou V, Timmerman M F et al. J Periodontol 1998; 69: 759-764

In this study, bottle brushes removed plaque more effectively than floss, but differences were small.

Over a period of 6 weeks, 26 patients aged 27-72 years (mean 37), with mean proximal probing depth 5.7 mm, used dental floss on one side of their dentition, and interdental bottle brushes on the other. Instruction was given at baseline and week 3.

At the end of the 6 weeks, the reduction in proximal plaque was 50% better with bottle brushes than with floss; and proximal probing depth was reduced on average by 0.8 mm with bottle brushes, as opposed to 0.6 mm with floss.

When asked to show the ease of using each method on a visual analogue scale, patients indicated that bottle brushes were simpler; they also thought floss was less effective in plaque removal. More subjects encountered problems (such as difficulty in manipulation) when using floss than they did with the brushes.

## Evaluation of the incidence of gingival abrasion as a result of toothbrushing

Danser M M, Timmerman M F et al. J Clin Periodontol 1998; 25: 701-706

Gingival abrasion incidence was similar for electric and manual brushes, but varied with the shape of filament ends.

After 3 weeks' practice with a manual and an electric brush on alternate days, 47 subjects omitted oral hygiene for 1 day, were examined and then used each brush for 1 minute on 2 randomly chosen contralateral quadrants. Plaque removal was similar for both brushes, and there were no significant differences in gingival abrasion.

In a second study, the electric brush was used with two types of filament in another group of 47 subjects: one type had a 'roman' end, roughly hemispherical, and the other type was 'gothic' with the rounding coming to a point. In this study, following a similar design to the first, plaque removal was similar for both brushes, but the 'gothic' end produced significantly more gingival abrasion.

#### The effect of extraction of third molars on late lower incisor crowding: a randomised controlled trial

Harradine N W T, Pearson M H et al. Br J Orthod 1998; 25: 117-122

This interesting study suggests that there may be a pressure from behind which contributes to late incisor crowding, but extraction of third molars does not relieve it.

In this carefully executed prospective study, 164 patients who had completed orthodontic treatment in the upper arch only, and had third molars with a projected path of eruption through the second molar, were randomly assigned to extraction or retention of these teeth. After a minimum of 5 years (mean 5.5 years), recall was vigorously attempted for all patients, and 77 returned for examination. This group was similar to those initially recruited, suggesting little likelihood of responder bias.

In 39 cases, there had been subsequent lower premolar extractions, and in some cases this left residual space. When incisor crowding was compared in 44 with extracted third molars and 33 who retained them, there was no difference between groups in crowding; and the premolar extractions had no effect on this finding, although the groups differed in final arch length.

## Orthodontic care from the patients' perspective: perceptions of 27-year-olds

Bergström K, Halling A et al. Eur J Orthod 1998; 20: 319-329

Most individuals who had made an earlier decision to undergo orthodontic treatment were satisfied with their choice, but many who had refused treatment were now dissatisfied.

Previous Swedish studies have suggested that orthodontic outcome was in general more favourable for treatment by specialist rather than general practitioners, and that specialists also treated more difficult cases. Out of a sample of 302 patients examined in 1987 in these studies, 121 who had received treatment (all traceable) and 76 who had not (random selection), were sent questionnaires some 8 years later.

The response rate was 81%. Of those who were treated, two-thirds felt they had received the right amount of attention, and more than one-half felt that dental professionals had had the greatest influence on the decision. Only 5% of treated individuals regretted the decision, but 58% of untreated subjects wished it had been otherwise. Quality of care was judged higher in most respects when it had been given by a specialist, particularly in respect of technical competence and patient involvement in decisions.