Plaque Removal

in vivo study

Plaque removal efficacy of a Sonicare Elite in periodontal maintenance patients compared to a manual toothbrush


Objective
To compare the plaque removal efficacy of Sonicare Elite and a manual toothbrush in a periodontal maintenance population.

Methodology
Forty-two periodontal maintenance patients were enrolled in this randomized, controlled, single-blind crossover study. Participants were assigned to either a manual toothbrush or Sonicare Elite and used each product for a period of 12 weeks. Patients returned to their regular oral hygiene regimen for a period of two weeks before brushing with the second assigned product for another 12 weeks. Prior to entering each of the study periods, participants received a professional polish and brushing instructions. Full-mouth plaque scores (Silness & Löe, 1973, six surfaces per tooth) were taken at 8 and 12 weeks.

Results
The mean value for the Plaque Index (PI) after eight weeks of use was 0.93 for the manual brush and 0.19 for Sonicare Elite. The respective values after 12 weeks were 0.90 and 0.14. The differences found after 8 weeks (0.74; p<0.001) and 12 weeks (0.76; p<0.001) were statistically highly significant in favor of the Sonicare Elite.

Conclusion
Sonicare Elite was significantly more effective than a manual toothbrush at removing supragingival plaque in a periodontal maintenance population after 8 and 12 weeks.