



Plaque Removal

in vivo study

Comparison of Plaque Removal by Sonicare FlexCare Platinum and Oral-B Professional Care 5000 with Smart Guide

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Objective

To compare the plaque removal efficacy and safety of two power toothbrushes; Sonicare FlexCare Platinum and Oral-B Professional Care 5000.

Methodology

One-hundred ten healthy adults (mean age 44.3 years, 94 female/16 male) were enrolled in this Ethics-committee approved crossover, Examiner-blinded clinical trial. Eligible subjects were non-smokers, aged 18-65 years who were routine manual toothbrush users. Enrolled participants had a minimum average plaque score of 1.8 (Lobene and Soparker Modified Quigley and Hein Plaque Index) following 24 (+/-4) hours plaque accumulation. All enrolled subjects were dispensed study products per randomization, either Sonicare FlexCare Platinum and InterCare brush head or Oral-B Professional Care 5000 with FlossAction brush head and Smart Guide, and instructed on product use technique. Study subjects commenced a 3-day power toothbrush use familiarization period followed by a manual toothbrush 3-day wash-out phase. Subjects then returned to clinic with 24 (+/-4) hours plaque accumulation and underwent an efficacy evaluation where plaque was assessed before and after supervised product use. Safety was assessed per subject report and intraoral examination. Subjects were then dispensed the alternate product per randomization and followed the same home-use procedure of power toothbrush familiarization followed by manual toothbrush wash-out. The final study visit was completed including the 24 (+/-4) hour plaque accumulation period and the in-clinic plaque and safety examinations before and after product use. Subjects were then dismissed from study.

Results

Philips Sonicare FlexCare Platinum was statistically significantly superior to Oral-B Professional Care 5000 in reducing surface plaque overall (p-value <0.0001) including in hard-to-reach posterior interproximal areas (p-value <0.0001).

The reported safety events were mild in severity and were either unlikely or unrelated to test product use.

Conclusions

Philips Sonicare FlexCare Platinum was found to remove significantly more plaque than Oral-B Professional Care 5000 when assessed over the entire dentition and in all sub-regions of the mouth. Both products were safe for use.

LS Means, Percent Plaque Removal
% Plaque Reduction

