

Plaque Removal

in vivo study

Comparison of plaque removal by Sonicare For Kids and a manual toothbrush in children aged 7–10 years

Millleman J, Putt M, Olson M, Master A, Jenkins W, Schmitt P, Strate J. *International J Pediatric Dent.* 2009; 19:s1

Objective To compare the plaque removal efficacy and safety of Sonicare For Kids at “high” setting and Oral-B Stages 4® manual toothbrush (MTB) in children aged 7–10 years.

Methodology Fifty-eight healthy children enrolled in and four withdrew from an IRB-approved single-blind, randomized, parallel-design study (totaling 32 females, 22 males; mean age 8.3 years). Informed consent/assent (with parent) was obtained. All subjects abstained from brushing for 26 ± 6 hours prior to examination visits. At Visit 1, subjects were screened for eligibility (Turesky-Modified Quigley-Hein Plaque Index (TPI) > 1.8). Eligible subjects were enrolled and instructed on use of both devices (Sonicare For Kids and MTB) in alternating manner at home (twice daily for two minutes) for a one-week familiarization period. At Visit 2, baseline TPI was performed followed by a randomization and supervised two-minute brushing session with the assigned device. Post-brushing TPI scores were then obtained. Safety was assessed in oral soft tissue examinations at Visit 2. ANOVA was used for the primary statistical analysis.

Results Sonicare For Kids removed significantly more plaque than a manual toothbrush from the dentition overall (p=0.0001) as well as in hard-to-reach areas, i.e., the posterior teeth (p=0.0005) and the interproximal spaces (p<0.0001) of children aged 7–10 years. Both toothbrushes were safe to use.

Conclusion Sonicare For Kids was found to remove significantly more plaque than Oral-B Stages 4 manual toothbrush in children aged 7–10 years. It is also proven safe and gentle on oral tissues.

