



Gingival Health

in vivo study

Comparison of gingivitis reduction and plaque removal by Sonicare DiamondClean and a manual toothbrush

DeLaurenti M, et al. An Evaluation of Two Toothbrushes on Plaque and Gingivitis. Journal of Dental Research. 2012, 91(Special Issue B):522..

Objectives

To evaluate the ability of the Sonicare DiamondClean to reduce gingivitis and gingival bleeding versus a manual toothbrush over time.

To compare the plaque removal ability of the Sonicare DiamondClean to a manual toothbrush over time.

Methodology

One hundred forty-two healthy adults aged 18-64 years participated in a single-blind, randomized, parallel group clinical study assessing gingivitis and plaque over time for the Sonicare DiamondClean and an ADA reference manual toothbrush. Eligible subjects were routine manual toothbrush users with a minimum Turesky Quigley-Hein Plaque Index of ≥ 1.8 presented following three to six hours plaque accumulation, with at least 20 sites graded ≥ 1 by the Modified Gingival Index. Eligible subjects were randomized and trained on product usage twice daily. Subjects retained the assigned product for four weeks. Efficacy and safety evaluations occurred at Weeks 2 and 4, in which gingivitis and plaque levels were reassessed.

Results

The Sonicare DiamondClean showed significant reduction from baseline in gingivitis after two and four weeks of product use ($p < 0.0001$).

The Sonicare DiamondClean showed significant reduction from baseline in the number of sites with gingival bleeding over two and four weeks ($p < 0.0001$).

The Sonicare DiamondClean was significantly superior to a manual toothbrush in reducing gingivitis and the number of sites with gingival bleeding over two and four weeks ($p < 0.0001$).

The Sonicare DiamondClean showed significant reduction from baseline in plaque after two and four weeks of product use ($p < 0.0001$).

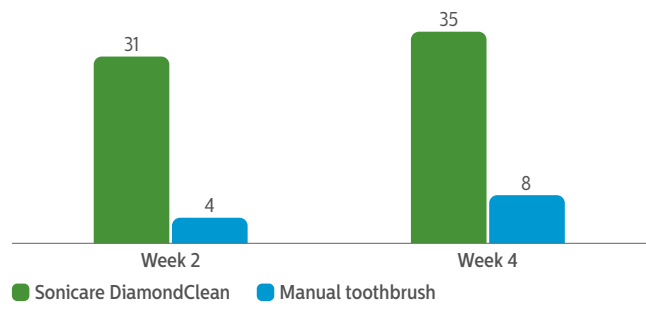
The Sonicare DiamondClean was significantly superior to a manual toothbrush in overall percent plaque reduction over two and four weeks ($p < 0.0001$).

The Sonicare DiamondClean was superior to a manual toothbrush in plaque reduction in all sub-regions of the mouth over two and four weeks ($p < 0.0001$).

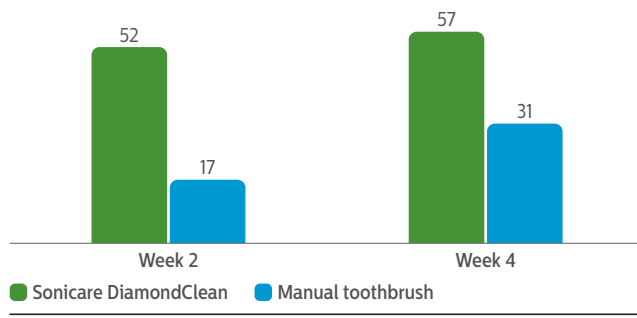
Conclusion

Sonicare DiamondClean was demonstrated to be up to two times more effective at reducing gingivitis and gingival bleeding relative to a manual toothbrush, and up to five times more effective at removing plaque. Both products were safe for use.

Percent Plaque Reduction from Baseline Overall
% of Plaque Reduction



Percent Reduction in Sites of Gingival Bleeding from Baseline
% of Bleeding Reduction



Percent Gingivitis Reduction from Baseline Overall
% of Gingivitis Reduction

