Gingival Health

in vivo study

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


Objectives

To evaluate the ability of the Sonicare FlexCare to reduce gingivitis and gingival bleeding over time.

To compare the plaque removal ability of the Sonicare FlexCare to a Oral-B P-40 manual toothbrush over time.

Methodology

One hundred seventy-five 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 FlexCare and a manual toothbrush. Eligible subjects were routine manual toothbrush users with a minimum Silness and Löe plaque index of >0.8 presented following three-six hours plaque accumulation, with at least 20 sites graded >2 by the Löe and Silness Gingival Index. Eligible subjects were randomized and trained on product usage, two minutes 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 FlexCare showed significant reduction from baseline in gingivitis after two and four weeks of product use (p<0.0001).

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

The Sonicare FlexCare was superior to a manual toothbrush in reducing the number of sites with gingival bleeding over four weeks (p=0.0293).

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

The Sonicare FlexCare was superior to a manual toothbrush in overall percent plaque reduction over four weeks (p=0.015).

The Sonicare FlexCare was superior to a manual toothbrush in plaque reduction in hard-to-reach areas over four weeks [posterior p=0.002, interproximal p=0.02, posterior interproximal p=0.007].
Conclusion

Sonicare FlexCare was found to be safe and effective in reducing gingivitis and plaque. FlexCare was found to be superior to a manual toothbrush in reducing plaque and sites of gingival bleeding over time.

**Percent plaque reduction from baseline overall**

- Sonicare FlexCare: 43.9% at Week 4
- Sonicare FlexCare: 22.7% at Week 2
- Manual Toothbrush: 40.0% at Week 4
- Manual Toothbrush: 20.3% at Week 2

**Percent gingivitis reduction from baseline overall**

- Sonicare FlexCare: 28.4% at Week 4
- Sonicare FlexCare: 14.7% at Week 2
- Manual Toothbrush: 27.8% at Week 4
- Manual Toothbrush: 13.0% at Week 2

**Percent reduction in sites of gingival bleeding from baseline**

- Sonicare FlexCare: 71.2% at Week 4
- Sonicare FlexCare: 53.8% at Week 2
- Manual Toothbrush: 67.6% at Week 4
- Manual Toothbrush: 53.0% at Week 2