Sonic powered toothbrushes and reversal of experimental gingivitis

ABSTRACT 0099

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OBJECTIVE

This study compared two sonic toothbrushes, the Oral-B® Sonic Complete toothbrush (S18) and the Sonicare Elite (SE) in relation to reversal of experimental gingivitis.

METHODS

The study had a randomised, examiner-blind, split-mouth design. After dental prophylaxis, subjects refrained from brushing mandibular teeth for 21 days to allow development of gingivitis. During a 4-week treatment phase, the right or left side of the mouth was brushed with either the S18 or the SE toothbrush as randomly allocated. Plaque and gingivitis were assessed at baseline (day 0), after 21 days of no oral hygiene, and after 1, 2 and 4 weeks of brushing twice daily. Gingival abrasion was assessed at baseline (day 0) and after 1, 2 and 4 weeks of product use.

RESULTS

Of the 37 subjects who entered the study 34 subjects provided evaluable data. The experimentally induced gingivitis (EIG) period resulted in higher bleeding and plaque scores compared to baseline. After 4 weeks of use, the mean plaque scores changed from 3.09 (day 21) to 1.30 for the S18 and from 3.02 (day 21) to 1.21 for the SE. The mean bleeding scores changed from 1.87 (day 21) to 0.97 for the S18. For the SE these changes were from 1.83 (day 21) to 0.92. For the assessments at 1, 2, and 4 weeks post-EIG both brushes showed a significant decreases in bleeding scores but there were no significant differences between both brushes. The overall gingival abrasion score at the 4 week assessment was 1.91 for the S18 and 1.26 for the SE which did not differ significantly (p=0.257).

CONCLUSIONS

There was no significant difference with regard to resolving experimental gingivitis between both sonic brushes. Under the conditions of the trial both brushes also appeared to be safe to oral tissues. This study was sponsored by Oral-B Laboratories.