

3-month assessment of the safety and efficacy of two toothbrushes



Oral-B
Sonic Complete

ABSTRACT 0933

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OBJECTIVE

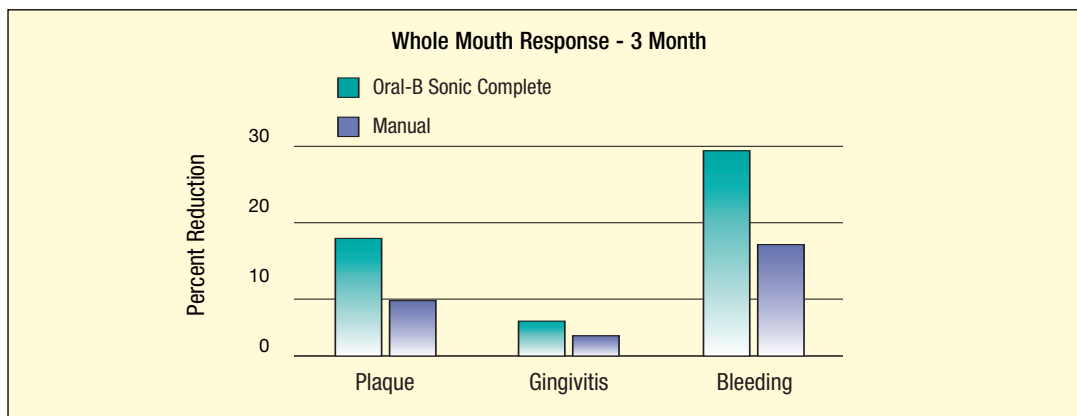
To compare the safety and efficacy of the Oral-B® Sonic Complete power toothbrush (OBSC) and a manual toothbrush (MT) in the reduction of gingivitis and plaque over a 3-month period.

METHODS

After no oral hygiene for 12-18 hours, subjects received plaque and gingival assessments and an oral hard and soft tissue examination. Subjects were stratified and randomized within treatment groups based on baseline whole mouth Löe & Silness GI and Turesky modified Quigley Hein PI scores. Subjects were instructed to brush twice daily with their assigned toothbrush and toothpaste. Clinical assessments were repeated after 1-month and 3-months by the same examiner blind to treatment assignment. Changes from baseline within treatment groups were analyzed using a paired t-test and between groups using an ANOVA.

RESULTS

Data were obtained from 109 subjects (OBSC n=58; MT n=51). Treatment groups did not differ significantly in gender, age or baseline gingivitis or plaque scores (p>0.05). Both toothbrushes were found to be safe and significantly reduced plaque, gingivitis and gingival bleeding scores after 1 and 3 months (p<0.05). Plaque reduction was significantly greater with OBSC than MT for whole mouth (0.474±0.449 vs. 0.261±0.421; p=0.0125) and approximal surfaces (0.510±0.463 vs. 0.270±0.422; p=0.0059) at 3 months. OBSC showed significantly greater reductions than MT at 1 month in gingivitis at approximal sites (0.118±0.098 vs. 0.080±0.093; p=0.0439) and in bleeding for whole mouth (0.078±0.068 vs. 0.050±0.069; p=0.0359) and approximal surfaces (0.097±0.088 vs. 0.058±0.083; p=0.0216); differences at 3 months were not statistically significant.



Approximal mean (SD) plaque, 1 Month and 3 Month plaque, gingival and bleeding at Baseline, 1 Month and 3 Month. P-values for group comparisons.

	Product	Baseline	1 Month	3 Month
Plaque	Oral-B Sonic Complete	2.9641 (0.4229)	2.4667 (0.6108)	2.4545 (0.5667)
	Manual TB	2.9174 (0.4634)	2.5771 (0.4400)	2.6476 (0.4579)
	P-value	P>0.05	P=0.0948	P=0.0059
Gingivitis	Oral-B Sonic Complete	1.2086 (0.0960)	1.0910 (0.0822)	1.1403 (0.0947)
	Manual TB	1.1996 (0.0856)	1.1195 (0.0922)	1.1645 (0.1037)
	P-value	P>0.05	P=0.0439	P=0.0704
Bleeding	Oral-B Sonic Complete	0.2050 (0.0927)	0.1084 (0.0662)	0.1444 (0.0874)
	Manual TB	0.1964 (0.0850)	0.1382 (0.0783)	0.1644 (0.1002)
	P-value	P>0.05	P=0.0216	P=0.1056

CONCLUSIONS

- Both products were found to be safe over the 3 month study period.
- Oral-B Sonic Complete was effective at 1 and 3 months in reducing plaque and gingivitis.
- The Oral-B Sonic Complete demonstrated significantly greater reductions in plaque over manual tooth brushing during 3 months of use.