

Evaluation of plaque removal efficacy of two power toothbrushes



ABSTRACT 0936

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OBJECTIVE

To compare the safety and plaque removal efficacy of the Oral-B® Professional Care Series 7000 (PCS) and the Doltz EW1024 (DZ) power toothbrushes.

METHODS

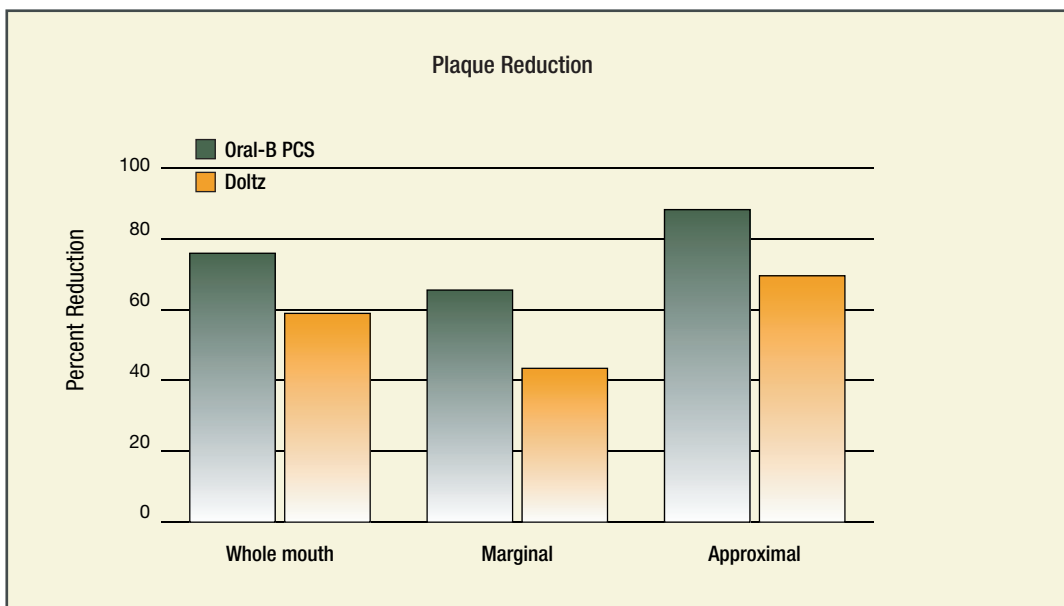
Sixty-one healthy subjects (24 males/37 females) participated in this randomized, single-blind, single-use, crossover study. After abstaining from oral hygiene procedures for 23-25 hours, subjects had an oral tissue examination and those with a whole mouth pre-brushing plaque score of ≥ 0.6 based on the Rustogi modified Navy Plaque Index were randomly assigned to treatment sequence. Subjects brushed under supervision for 2 minutes with a controlled amount of toothpaste, after which oral tissues were re-examined and plaque was reassessed. Following a brief washout period, clinical procedures were repeated with the alternate toothbrush. All clinical measurements were performed by the same examiner blind to treatment sequence.

RESULTS

Both toothbrushes were found to be safe after single brushing and significantly reduced plaque levels (t -test; $p=0.0001$). The PCS removed significantly more plaque than the DZ (ANOVA, $p=0.0001$) on all surfaces examined, with reductions of 75.9% vs. 59.8% from the whole mouth, 65.5% vs. 44.8% at marginal sites and 85.7% vs. 70.2% at approximal sites for the PCS and DZ, respectively.



Oral-B
ProfessionalCare
7000 Series



CONCLUSIONS

- Both toothbrushes were safe to oral tissues after single-use.
- The results clearly demonstrate that while both power toothbrushes were safe and effective, the plaque removal ability of the Professional Care Series 7000 toothbrush was significantly greater than the Doltz EW1024.
- The advantage in plaque reduction in favor of the Professional Care Series 7000 was evident for both the whole mouth and difficult-to-access gingival margin and approximal surfaces often missed by toothbrushing.