

# Poster Presentations

Thursday, June 29



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## *Toothbrushing Time Following Instruction*

**N.A.M. ROSEMA**, P.A. VERSTEEG, M.F. TIMMERMAN, U.V.D. VELDEN, and G.A.V.D. WEIJDEN  
ACTA - Vrije Universiteit, Amsterdam, Netherlands

**Objectives:** To evaluate the compliance of a panelist to an instruction to brush for at least 2 minutes using different modes of toothbrushing. **Methods:** This study was part of a preventive project for which 120 subjects =18yrs old in general good health were selected and provided with a manual toothbrush and timer. A 3-week pre-trial period of intensive oral home care was started to improve the level of gingival health. All received a thorough professional OH instruction. Subjects were instructed to brush for at least 2 minutes twice daily. At baseline, subjects were assigned to 1 of 3 oral hygiene regimens: twice daily brushing with 1] oscillating/rotating toothbrush (n=35), 2] manual toothbrush (n=37), 3] manual toothbrush in combination with the use of floss (n=37). The same standard toothpaste was provided to all 3 regimens. Subjects were professionally instructed in their individually assigned regimen and were given a prophylaxis in order to start with equally clean teeth. Two weeks later they returned for an OH reinforcement. At 6 and 9 months subjects were asked to brush in front of a mirror as they would brush at home. Meanwhile one investigator recorded the brushing time, an action of which the panelists were unaware. **Results:** The recorded brushing time at 6-months was 129.5secs, 111.3secs, and 121.6secs for the regimens 1, 2, and 3 respectively. Subjects in the power toothbrush group brushed significantly longer than the manual toothbrush only group (Mann Whitney test  $p=0.006$ ). At 9 months the brushing times were 119.4secs, 116.5secs, and 120.3secs respectively. This difference between the 3 groups was not significant. **Conclusion: Subjects instructed to brush twice daily for 2 minutes will brush (under supervision) approximately for 2 minutes at 6 and 9 months following this instruction.** *This study was sponsored by: P&G Oral Health Care, Mason, OH, USA.*

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## *Two Soft Toothbrushes in Relation to Gingival Abrasion and Efficacy*

**P.A. VERSTEEG**, N.A.M. ROSEMA, M.F. TIMMERMAN, U.V.D. VELDEN, and G.A.V.D. WEIJDEN  
ACTA - Vrije Universiteit, Amsterdam, Netherlands

**Objectives:** To evaluate the effect of 2 soft manual toothbrushes with different filament and brush head designs in relation to gingival abrasion and plaque removing efficacy. **Methods:** 90 subjects were included in the study. They were divided among 2 groups and were allowed to become familiar with their randomly assigned brush for at least 10 days. During this period they brushed on alternate days with one of the 2 brushes. They returned for their first visit after having abstained from oral hygiene for at least 48 hours. Plaque and gingival abrasion were assessed. Next one group brushed according to split-mouth design with the Oral-B Advantage® Sensitive (OBAS) and as a control the ADA reference brush (CB) while the other group brushed with the Sensodyne® Sensitive (SS) and the CB. Post-brushing plaque and gingival abrasion were assessed. Next the assignment of the brushes was reversed (cross-over). Subjects were provided with new toothbrushes and again practiced on alternate days. They returned for session 2 which was identical to session 1 with the only exception being the brush assignment. Subsequently they were given new toothbrushes (SS & OBAS), again practiced and returned for session 3. A head to head comparison was made between the SS and the OBAS in a random split-mouth design. **Results:** The results show that with respect to abrasion the SS was more abrasive than the CB while the OBAS was less abrasive than the SS. Compared to the CB the OBAS was less effective (56% versus 49%,  $p<0.001$ ) and also less effective than the SS (50% versus 52%,  $p=0.028$ ). **Conclusion: The OBAS caused less gingival abrasion compared to the SS-brush with a marginal loss (2%) of efficacy.** *This study was sponsored by: P&G Oral Health Care, Mason, OH, USA.*