P&G Oral Presentations

Friday, March 18
1743 Denture Fit and Adhesive Consumption Among Complete Denture Wearers
Room 25C, 10:45am-12:15pm

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Objective: To evaluate the epidemiology of denture adhesive consumption and denture fit among frequent adhesive users with complete dentures.

Methods: The study was a single-center, blinded, single-treatment design. Study population was limited to adults with complete dentures (either maxillary, mandibular or both) who were frequent adhesive users (3 or more times a week). The study consisted of a Baseline and a Week 2 visit. At Baseline, denture fit was assessed using the Kapur scale. Denture adhesive (Fixodent Original) was distributed and subjects were instructed to use the product at home in their customary manner for 2 weeks. The number of adhesive uses per day and adhesive use habits and practices were recorded. Daily adhesive consumption was calculated over the 2-week use period.

Results: Three hundred and fourteen (314) subjects completed the study. Mean age was 63 years and 74% of subjects were female. Forty-six percent of subjects had maxillary complete dentures only, 1% had mandibular complete dentures only and 53% had a full set of dentures. Kapur scores ranged from 0 to 5 with a mean score of 2.48 (57% poor fitting, 28% fair fitting and 15% good fitting dentures). Mean adhesive consumption was 1.35 g/day for all subjects and 1.54 g/day for those with both maxillary and mandibular dentures. Values ranged from 0.11 to 4.44 g/day. Mean number of applications per day was 1.85 in all subjects and 2.18 g/day for those with a complete denture set. Values ranged from 1 to 6.5 applications/day. Adhesive consumption was negatively correlated with the Kapur score.

Conclusion: The study provided understanding of adhesive consumption in a population with various degrees of denture fit and demonstrated that while denture fit and adhesive consumption were correlated, no subject used more than 4.4 g/day of adhesive on average over the course of this study.

Saturday, March 19
2991 RCT Evaluating Onset of Sensitivity Relief for Stannous Fluoride Dentifrice
Room 29D, 8am-9:30am

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Objectives: To evaluate the onset of sensitivity relief for an experimental 0.454% stannous fluoride dentifrice relative to a regular sodium fluoride negative control over a 2-week period.

Methods: This study was a randomized, parallel group, negative-controlled, 2-week clinical trial. After institutional review and consent, subjects reporting dentinal hypersensitivity on 2 teeth (Schiff Air Index of 2-3 and Yeaple Probe 10g) were enrolled and randomized to blinded tubes of either an experimental 0.454% stannous fluoride dentifrice or negative control (Colgate® Cavity Protection) used twice daily for 2 weeks. Subjects followed manufactures' instructions for use which included brushing each of 2 sensitive teeth first for 30 seconds in the experimental dentifrice group. Thermal cold air assessments for the Schiff Index and Visual Analog Scale (VAS) were performed at baseline, immediately after the first product use, day 3, and week 2 with treatment comparisons using ANCOVA. Tactile Yeaple probe assessments were performed at baseline, day 3, and week 2 with treatment comparisons using ANOVA.

Results: 111 subjects participated in the research with a mean age of 44 years, and groups were balanced on demographics and baseline sensitivity scores. The stannous fluoride dentifrice demonstrated significantly ($p<0.0001$) superior sensitivity relief relative to the negative control for each sensitivity assessment at each measured post-baseline timepoint. Mean % reductions for the stannous fluoride dentifrice relative to the control were 13.8% immediately after the first use, 31.8% by day 3, and 61.3% by week 2 for the examiner-assessed Schiff Index. For the subject-assessed VAS, mean % reductions were 14.6% immediately after the first use, 34.8% at day 3, and 66.6% at week 2.

Conclusions: In a randomized controlled clinical trial, an experimental 0.454% stannous fluoride dentifrice demonstrated instant onset of sensitivity relief that continued over the 2-week usage period relative to a regular sodium fluoride dentifrice.

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