

Saturday, March 12



2741

Clinical Trial Evaluating Malodor Reduction Benefit of a Marketed Dentifrice

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Objective: A clinical study was conducted to evaluate breath malodor reduction following single and cumulative use of a triclosan-containing marketed dentifrice (blend-a-med Complete Night). **Methods:** The study was a three-period, cross-over study, with 2 washout periods. 29 healthy adult volunteers were acclimated for 7 days with standard toothpaste. After, subjects were randomized to three brushing regimens for each period: tooth brushing with Complete Night toothpaste, tooth brushing and tongue brushing with Complete Night, and tooth brushing with Crest® Cavity Protection toothpaste as a control. The production of volatile sulfur compounds was monitored at baseline, and again after 3, 24 & 27 hours. A questionnaire was completed after 24 & 27 hours to assess first-person perception of malodor. **Results:** Mean (SD) age was 40.2 (10.9) years. Relative to control, both triclosan groups experienced significant ($p < 0.05$) malodor reduction at 3 and 27 hours. In addition, the triclosan group with tongue brushing regimen showed significant ($p < 0.05$) malodor reduction versus the control at 24 hours and the no-tongue brushing group at 27 hours. Subjects using the triclosan dentifrice reported significantly ($p < 0.05$) higher improvement in breath compared to the control. Tongue brushing resulted in a significant ($p < 0.05$) improvement in the perception of tongue cleanliness. All treatments were well tolerated. There were no adverse events reported during the study. **Conclusion: Use of the triclosan-containing toothpaste resulted in significant reduction in VSCs after a single dosing and with cumulative use, tongue brushing improved reduction of VSCs, and both day-time and overnight results were first-person noticeable.**

Thursday, March 10



0287

Clinical Trial Assessing Light Enhancement of In-Office Tooth Whitening

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Objective: This clinical study evaluated a light-enhanced, in-office tooth whitening system, in order to assess whether light enhancement of the peroxide gel affected tooth color and safety. **Methods:** 33 adults were randomly assigned to one of three treatment groups balancing for age and starting color. Professional treatment involved application of a 25% hydrogen peroxide gel (Discus Dental® Zoom!™) with light enhancement, peroxide gel alone, or the light alone with no peroxide. The 12 anterior teeth were treated 3 times for 20 minutes each. Efficacy was measured objectively as $L^*a^*b^*$ color change using digital images, tooth shade was measured, and safety was evaluated immediately after treatment, and at post-treatment Day 7 and Day 30. **Results:** After $b^*\Delta$ adjusting for baseline and age, immediate (end-of-treatment) means (SE) for (yellowness) were -3.1 (0.25) for the combination group, -2.0 (0.25) for the gel only group, and -2.4 (0.25) for the light only group. Significant ($p < 0.05$) color rebound was evident at post-treatment Day 7. By Day 30, adjusted means b^* were -1.7 (0.20) for the combination group, -1.1 (0.20) for the gel Δ (SE) for only group, and -0.5 (0.20) for the light only group. Both peroxide groups differed significantly ($p < 0.05$) from light alone on Δb^* and ΔL^* . Vita shade results were generally similar. Tooth sensitivity represented the most common adverse event in the two gel groups. In the combination group, 91% of subjects experienced tooth sensitivity, the majority of which was moderate or severe. This resulted in 3 subjects discontinuing treatment early during the application visit. Adverse events were low in the light only group. **Conclusion: Use of light enhancement for in-office whitening lead to immediate color change, after which, there was significant color and shade rebound within 7 days, as well as, moderate-to-severe tooth sensitivity during and after treatment.**