NUPRO Sensodyne prophylaxis paste with NovaMin for the treatment of dentin hypersensitivity: A 4-week clinical study

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ABSTRACT: Purpose: The primary objective of this study was to compare the effectiveness of NUPRO Sensodyne Prophylaxis Paste with NovaMin, with and without fluoride, to a standard prophylaxis paste without fluoride (control) in reducing dentin hypersensitivity immediately after a single application following dental scaling and root planing. The secondary objective was to compare the duration of sensitivity relief up to 28 days after a single application of the NUPRO pastes with NovaMin compared to the control paste. Methods: This was a randomized, single-center, controlled, three-treatment, parallel-group study conducted at Salus Research in Fort Wayne, Indiana. Male and female subjects who met all inclusion/exclusion criteria and had two non-adjacent sensitive teeth based on tactile (Yeaple probe) and air blast assessments, were enrolled in the study. At baseline, tactile and air blast stimuli were administered and subjects were stratified according to their baseline air blast (Schiff) scores into one of three treatment groups: Group A (NovaMin without fluoride), Group B (NovaMin with fluoride) or Group C (NUPRO classic prophylaxis paste without fluoride). Subjects were then assessed post-treatment and at a 28-day follow-up using tactile and air blast methods. Results: A total of 139 patients completed the study. Subjects having received the NovaMin containing prophylaxis pastes (Groups A and B) showed statistically lower (ANOVA, P< 0.05) dentin hypersensitivity compared to the control group immediately after the prophylaxis procedure. Group A tactile improvements were 86% immediate, and 88% after 28 days; air blast improvements were 49% immediate, and 50% after 28 days. Group B tactile improvements were 67% immediate, and 65% after 28 days; air blast improvements were 43% immediate, and 34% after 28 days. Group C experienced little improvement in tactile and air blast scores, 9% and 4% respectively, immediately following treatment, and 10% and 1% respectively after 28 days. At both time points, the reduction in sensitivity was meaningful and significantly better than in the group receiving a standard prophylaxis paste as the comparator (P< 0.05). Both NovaMin pastes were effective and there was no statistical difference between the pastes with and without fluoride. There were no adverse events reported during the course of this study. (Am J Dent 2012;25:262-268).

CLINICAL SIGNIFICANCE: NUPRO Sensodyne Prophylaxis Paste with NovaMin relieves dentin hypersensitivity when applied during a standard prophylaxis procedure and for up to 4 weeks (28 days) after a single application.

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