

## **Clinical efficacy of Colgate Sensitive Pro-Relief in-office desensitizing paste**

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### **A Clinical Investigation of the Efficacy of a Desensitizing Paste Containing 8% Arginine and Calcium Carbonate for the Reduction of Dentin Hypersensitivity When Applied Prior to Dental Prophylaxis**

In: American Journal of Dentistry 2009 (in press)

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### **Study objectives:**

The objective of the study was to compare the efficacy in reducing dentin hypersensitivity of two in-office pastes when applied as a pre-procedure to a professional dental cleaning.

### **Trial conditions and methods**

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#### **Products under investigation**

Test: Colgate Sensitive Pro-Relief desensitizing paste (Colgate Palmolive, New York, NY) containing 8% arginine in a calcium carbonate/silica base.  
Control: Nupro pumice-based fluoride free prophylaxis paste (Dentsply, York, PA)

#### **Study subjects**

A total of 45 male and female subjects (aged between 23 and 66 years) with established dentin hypersensitivity (two hypersensitive teeth with a tactile sensitivity score [Yeaple probe] of 10-50 grams of force and an air blast score of 2 or 3 on the Schiff Cold Air Sensitivity Scale)

#### **Methods**

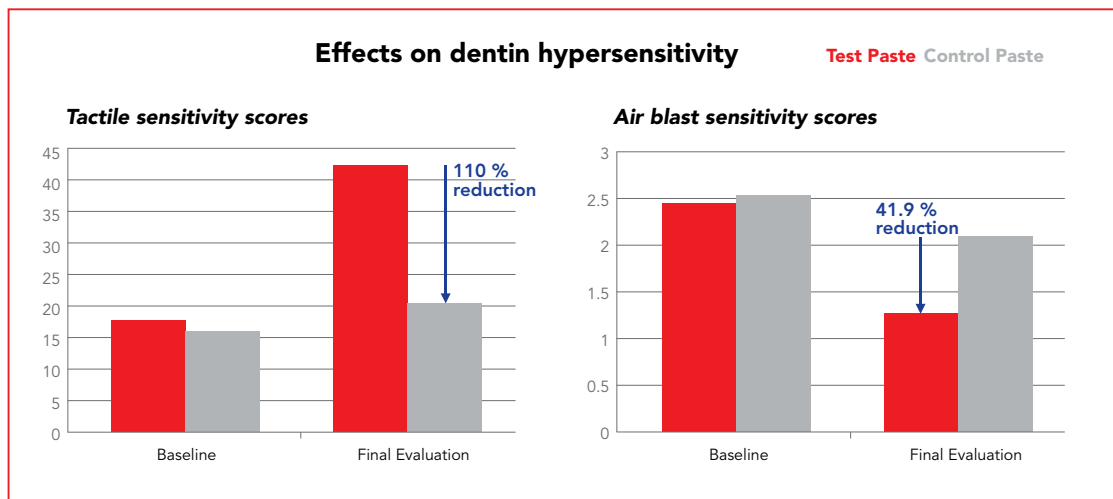
In this double-blind, parallel group study, 45 subjects with established dentin hypersensitivity were randomly assigned to either the test (n=22) or control (n=23) group. Following baseline evaluation of dentin hypersensitivity, the assigned in office paste was applied as a pre-procedural step prior to professional cleaning. Immediately after completion of the cleaning procedure, subjects were re-evaluated for tactile and air blast sensitivity scores. Statistical analyses were performed separately for tactile and air blast scores. Within treatment comparisons were performed using a T-test. Comparisons between

treatments using baseline adjusted scores were performed using analysis of covariance (ANCOVA).

## Results

Immediately after the cleaning procedure, subjects assigned to the test product demonstrated statistically significant improvements from baseline in tactile (143.9%) and air blast (49.4%) sensitivity scores. At the same time point, subjects assigned to the control product demonstrated statistically significant improvements from baseline in air blast (12.9%) sensitivity score. The improvement from baseline in tactile sensitivity score (16.2%) in the control subjects was not statistically significant.

Immediately after the cleaning procedure, the test product group demonstrated statistically significant improvements compared to the control group in tactile (110.0%) and air blast (41.9%) sensitivity scores.



## Conclusion

When applied prior to a professional dental cleaning, Colgate Sensitive Pro-Relief desensitizing paste with 8% arginine and calcium carbonate provides a statistically significant reduction in dentin hypersensitivity measured immediately following the dental cleaning as compared to a control prophylaxis paste.