

Title: 2391 - Determining the Anti-Erosive Effect of a Stannous Fluoride Containing Paste

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Abstract:

Objectives: Objectives: To determine the enamel protection efficacy of a stannous fluoride containing dentifrice compared to a conventional sodium fluoride containing dentifrice using a 10 day in situ erosion model.

Methods: Methods: This was a single centre, double-blind, randomised, supervised usage, two-treatment, four period crossover study. 36 subjects were recruited onto the study. Each subject wore a palatal appliance hosting two polished human enamel specimens per treatment period. Two dentifrices were investigated; Crest Pro Health Sensitive and Enamel Shield (CPH-SES) containing 0.454% stannous fluoride (1100 ppm F) and Colgate Total (CT) containing 0.243% sodium fluoride (1100 ppm F). The subjects swished their assigned toothpaste slurry around their mouth for 60 seconds twice daily. Each subject also swished 250 ml orange juice around their mouth for 10 minutes 4 times daily. The appliances were worn for approximately 6 hours each day. Each treatment period lasted 10 days. After 10 days the enamel specimens were removed and measured for surface loss using contact profilometry.

Results: Results: 33 subjects completed the study with all data deemed evaluable. Three subjects withdrew voluntarily. After 10 days the amount of enamel loss for specimens treated with CPH-SES was 0.279 μm whilst the amount lost from specimens treated with CT was 2.877 μm . The difference in the amount of surface loss was highly significant at <0.001 .

Conclusions: Conclusion: The CPH-SES paste showed 90.3% significantly lower enamel loss relative to the CT treatment. Both treatments were well tolerated.

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Disclosure Statement:

The submitter must disclose the names of the organizations with which any author have a relationship, the nature of the relationship, and the clinical or research area involved.

The following is submitted: **Tao He is employed by Procter and Gamble as a Principal Clinical Scientist.**

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