Desensitizing Effect of a Stabilized Stannous Fluoride/Sodium Hexametaphosphate Dentifrice


CONCLUSION

- Crest® Pro-Health™ showed a clinically and statistically significant decrease in hypersensitivity compared to a negative control dentifrice.

OBJECTIVE

To evaluate the desensitizing properties of Crest Pro-Health compared to a negative control dentifrice.

MATERIALS AND METHODS

- Crest Pro-Health (stabilized 0.454% stannous fluoride/sodium hexametaphosphate dentifrice) was compared to a marketed negative control dentifrice containing 0.243% sodium fluoride (Crest® Cavity Protection Regular Paste).
- Study subjects were adults with a minimum of 2 bicuspid/cuspid teeth with sensitivity criteria of Yeaple Probe Index = 10 g and Schiff Air Sensitivity Scale score of >1.
- Tooth sensitivity was measured by tactile examination using the Yeaple probe and thermal examination using the Schiff Air Index.
- Oral soft tissue examinations were conducted and adverse events recorded.
- Subjects were randomized to either the stannous fluoride/sodium hexametaphosphate dentifrice or the control dentifrice.
- Subjects brushed twice daily with their assigned dentifrice and manual soft toothbrush for 8 weeks.
- Subjects were examined again for tooth sensitivity and safety at Weeks 4 and 8.

RESULTS

- Data were analyzed for 77 subjects who had complete data.
- Yeaple Probe Index scores were statistically significantly higher for the stannous fluoride/sodium hexametaphosphate group than the sodium fluoride control group at both Weeks 4 and 8 (p<0.0001). Higher Yeaple Probe Index scores indicate less tooth sensitivity.
- Compared to the sodium fluoride control group, the stannous fluoride/sodium hexametaphosphate group had a mean Yeaple Probe Index score 1.6 times that of the sodium fluoride group at Week 4 and 2 times at Week 8.

- Schiff Air Index scores were statistically significantly lower for the stannous fluoride/sodium hexametaphosphate group than the sodium fluoride control group at both Weeks 4 and 8 (p<0.0001). Lower Schiff Air Index scores indicate less tooth sensitivity.

- Compared to the sodium fluoride control group, the stannous fluoride/sodium hexametaphosphate group showed a 36% lower Schiff Air Index score (adjusted mean) than the sodium fluoride group at Week 4 and a 44% lower score at Week 8.

- No adverse events were reported or observed.

Lower Schiff Air Index Scores indicate less tooth sensitivity.