

Clinical Comparison of the Anticalculus Efficacy of Two Triclosan-Containing Dentifrices

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A three-month, double-blind parallel and unsupervised clinical study was conducted to determine the effects on supragingival calculus formation of two triclosan-containing dentifrices, as compared to a placebo dentifrice. The dentifrices used in the study were: 1) A placebo dentifrice containing 0.243% sodium fluoride in a silica base; 2) A dentifrice containing 0.3% triclosan and 5.0% soluble pyrophosphate in a 0.243% sodium fluoride/silica base; and 3) A dentifrice containing 0.3% triclosan and 2.0% copolymer (Gantrez) in a 0.243% sodium fluoride/silica base. One hundred thirty-eight adult male and female subjects completed the three-month duration of the study. Subjects were stratified into three balanced groups according to Volpe-Manhold calculus scores obtained from a three-month pre-test period where subjects used a placebo dentifrice. After a complete and thorough oral prophylaxis, subjects were assigned to the use of one of the three dentifrices. Subjects were instructed to brush their teeth with their assigned dentifrice and soft-bristled toothbrush twice daily for three months. Subjects were then evaluated by the examining dentist for supragingival calculus formation using the Volpe-Manhold calculus assessment procedure. The three-month results from the study indicated that the dentifrice containing 0.3% triclosan and 5.0% soluble pyrophosphate reduced supragingival calculus formation by 23.93% (statistically significant at the 99% level of confidence), as compared to the placebo dentifrice. Additionally, the dentifrice containing 0.3% triclosan and 2.0% copolymer reduced supragingival calculus formation by 35.58% (statistically significant at the 99% level of confidence), as compared to the placebo dentifrice. There was no statistically significant difference between the two triclosan-containing dentifrices.