Evaluation of the Antiplaque Efficacy of Two Cetylpyridinium Chloride-Coating Mouthwashes

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ABSTRACT

Objective: The purpose of this clinical study was to evaluate the efficacy in reducing dental plaque regrowth of two mouthwashes containing 0.075% cetylpyridinium chloride (CPC), one with 6% alcohol and one alcohol-free, as compared to a negative control mouthwash without CPC, using Modified Gingival Plaque Index (MGMPI).

Methods: The investigational regimen consisted of a foaming cleanser, an acne serum, a spot treatment, and a mask. Patients applied the treatment regimen as directed for 8 weeks. The primary efficacy measure was the percentage of patients assessed as improved, much improved, or very much improved according to the Global Aesthetic Improvement Scale (GAIS) ratings at week 8. Severity was rated using the Evaluator's Global Severity Scores (EGSS) at baseline and weeks 2, 4, and 8. Tolerability was assessed at baseline and weeks 2, 4, and 8 by asking patients to rate the severity of itching, scaling, erythema, burning, dryness, and stinging. Patients were also asked to complete an acne questionnaire.

Results: 89.4% (42/47) met the primary end point determined by the GAIS of improved (66%), much improved (19%), or very much improved (4%). Notable reductions in lesion counts were observed in patients with more severe or inflamed lesions. Tolerability was queried at all visits. No itching, scaling, or erythema was reported after initial application. Symptoms of intolerability peaked at week 2; however, most events were mild to moderate and were typically reported with use of the mask component. Intolerance decreased by week 4 and by week 8. The treatment regimen was well tolerated by patients.

Conclusions: Two mouthwashes containing 0.075% CPC, one with 6% alcohol and the other alcohol free, were found to be safe and effective in reducing plaque accumulation when compared a negative control mouthwash without CPC. In short-term studies, the MGMPI appears useful for evaluating the antiplaque efficacy of mouthwash products.

(J Clin Dent 2011;22[Spec Iss]:200-203)