

Evaluation of the effect of locally delivered 2% curcumin gel (curcuma Longa) with non-surgical periodontal therapy in chronic periodontitis

Abstract

This study was aimed to evaluate the effectiveness of locally delivered 2% curcumin gel used as an adjunct to non-surgical periodontal therapy in chronic periodontitis. The present study consisted of 34 subjects, belonging to both sex, aged between 35- 50 years and all were chronic periodontitis patients with 4-6 mm pockets. They were randomly selected and divided into control and study groups. The control group received scaling and root planing alone whereas the study group received 2% curcumin gel along with scaling and root planing. Plaque index, bleeding on probing, gingival index, pocket depth and clinical attachment level were measured in each patient at baseline, 2ndweek and 4thweek.

Both groups demonstrated statistically significant reduction in PI, BOP, GI, PD and gain in CAL when compared to the baseline after treatment. However, curcumin gel group showed greater reduction in BOP and GI scores and statistically significant change in PD and CAL when compared to control group.

This study supports that locally delivered 2% curcumin gel can be safely and effectively used as an adjunct to non-surgical periodontal therapy and is more effective than scaling and root planing alone in the treatment of chronic periodontitis with 4-6 mm pockets.