The Effect Upon Early Root Surface Caries Lesions of the Daily Self-Application of Prevident Brush-on Gel

DePaola et al, 1991 Study abstract from Proceedings of Conference on Cariology

A 12-month, controlled, double-blind clinical trial, was conducted at a major dental center. Its intent was to determine the effect upon early root caries lesions of a once-daily at-home application of PreviDent Brush-On Gel, in conjunction with in-office fluoride treatments and daily brushing with a fluoride dentifrice.

The study was conducted among adult patients, each having at least one early root caries lesion. Through random assignment, half of the subjects were placed in a control group and the other half in a treatment group.

After a baseline clinical examination, the active and placebo gels were applied to the treatment group and control group, respectively. Next, patients were given hands-on instruction (supplemented with take-home materials) in proper brushing, flossing and the use of the gel formulation. Subjects were then provided with a supply of PreviDent Brush-On Gel or placebo gel, along with toothbrushes and toothpaste. Follow-up examinations occurred at four, eight and twelve months.

At the end of the 12-month study interval, 89% of the subjects treated with PreviDent showed arrestment of their early root caries lesions compared to only 28% of the control group.

Furthermore, the subjects treated with PreviDent showed a 91% arrestment of their early root caries lesions compared to a 40% arrestment of early root caries lesions in the control group.

A comparison of baseline, 4 month, 8 month and 12 month data showed a steady progression of benefit among PreviDent users as measured in terms of number of lesions arrested. Thus, the data suggest that the treatment method is effective in arresting early root surface lesions, from which it may be inferred that the method would also be effective among patients with exposed root surfaces in preventing the formation of lesions.