

*Effects of Supervised Chlorhexidine
Mouthrinse for School
Children Suffering from Gingivitis
(A Clinical Study)*

*A thesis
Submitted to the College of
Dentistry University of Baghdad
in Partial Fulfillment of the
Requirement for the Degree of
Master of Science in
Periodontic Dentistry*

By

Ragheed Tawfeek Salman

H.D.D. Perio.

Baghdad –Iraq

Supervisor

Assist. Prof. Dr. Likaa Mahmood Ibrahim

B.D.S.M.Sc.

Abstract

Plaque control is the main method for prevention of gingivitis. Chlorhexidine mouthrinse is widely recognized as helping to maintain plaque control and resolution of gingivitis.

The objective of this study was to evaluate the effect of two chlorhexidine mouthrinse preparations and two regimens (intermittent and continuous) of application as antiplaque and gingivitis and to compare between these two preparations and between these two regimens of applications.

A selected sample consists of (100) school child (48) males (52) females aged between (11-13) years with significant plaque and gingivitis enrolled in this study and assigned to one of the four groups (25 school children for each group) .

Group (1) rinsed with 10 ml of 0.1 % chlorhexidine six times weekly for 1 minute.

Group (2) rinsed with 10 ml of 0.2 % chlorhexidine twice weekly for 1 minute.

Group (3) rinsed with 10 ml of 0.2 % chlorhexidine six times weekly for 1 minute.

Group (4) rinsed with 10 ml of distilled water six times weekly for 1 minute as a placebo.

One week before baseline examination , all students received an oral prophylaxis to remove any dental deposits .

All rinsing procedure were performed under supervision without change oral hygiene habits of children.

Five clinical examinations using plaque and gingival indices were carried out at (baseline , 1-week , 2-week , 5-week and after another 3 weeks of stopping the treatment).

The results demonstrated that highly significant ($P<0.001$) improvement of oral hygiene status and gingival health for all test groups with increased effectiveness in group 3 , 1 , 2 respectively for PLI and GI after 5 weeks of chlorhexidine treatment compared to the placebo group. Also there were no significant differences in PLI and GI after another 3 weeks of stopping the treatment compared to 5th week .

There were highly significant differences between 0.2% continuous and 0.2% intermittent chlorhexidine mouthrinses in the inhibition of plaque and prevention of gingivitis.

There were highly significant differences between 0.1% and 0.2% intermittent chlorhexidine mouthrinses in the inhibition of plaque but there were no significant differences between them in prevention of gingivitis .

The female group showed more plaque reduction and resolution of gingivitis compared to male group after 5 weeks of clinical trial .

So, the use of chlorhexidine mouthrinses once a day as adjunct to regular normal oral hygiene procedures achieved a considerable benefit against. ingivitis in school children .