

Effect of herbal tooth formulation on plaque deposition: a comparative pilot study

Rupasinghe RAAN, Peiris KPP

Department of Shalya Shalakya, Gampaha Wickramarachchi Ayurveda Institute, University of Kelaniya, Yakkala, Sri Lanka

Abstract

Ayurveda and Sri Lankan traditional medical system devote a significant importance to oral health problems on its preventive aspect rather than curative. The proposed herbal formulation is specified as a dentifrice in *Talapathe Piliyam*. But it has not been scientifically evaluated. Therefore, this study was carried out to evaluate the effectiveness of reducing plaque accumulation on teeth, maintenance of oral hygiene and compare the efficacy of powder with the novel toothpaste. The formation in different forms (paste and powder) was prepared at the laboratory of Sri Lanka Ayurvedic Drug Cooperation, Navinna, Sri Lanka. Thirty patients were selected with written consent from *Shalakya* OPD by using specific proforma. They were randomly divided into two groups; group A and B (15 patients in each) irrespective of their sex, age, habitat etc. Group A was advised to brush twice a day for two weeks by using the toothpaste and group B from the same formation as powder. Oral Hygiene Index (OHI) and Plaque Index (PI) were used as an objective criteria. The OHI of group A varied as Poor (3.1-6.0) 66.67%, Fair (1.3-3.0) 33.33% and Good (0.0-1.2) 0% prior to the trial and showed as Poor 0%, Fair 86.6% and Good 13.33% after the trail period. In group B; Poor 20%, Fair 80% and Good 0% prior to the trial and showed as Poor 0%, Fair 93.37%, good 6.67% after the trial. The PI of group A varied as Poor (2.0-3.0) 66.67%, Fair (1.0-1.9) 33.33%, Good (0.1-0.9) 0% and Excellent (0) 0% prior to the trial and showed as Poor 0%, Fair 80%, Good 20% and Excellent 0% after the trial period. In group B; Poor 46.67%, Fair 53.33%, Good 0% and Excellent 0% prior to the trial and showed as Poor 0%, Fair 80%, Good 20% and Excellent 0% after the trial. Thus, it can be concluded this toothpaste is more effective in comparison to the tooth powder. However, a long term study would confirm the result of the study.

Keywords: Herbal tooth formulation

Corresponding E-mail: nuwanthika12@gmail.com