



▼ POST GRADUATES ABSTRACTS

PG - 71 : EVALUATION OF STREPTOCOCCUS MUTANS (SEROTYPES E, F, AND K) IN SALIVA SAMPLES OF 6-12 YEARS SCHOOL CHILDREN BEFORE AND AFTER A SHORT TERM DAILY INTAKE OF PROBIOTIC LOZENGE.

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Introduction: Probiotics as live microorganisms, on early administration can reduce *S.mutans* level, thereby reducing the risk of dental caries. Lozenge is an easy and acceptable vehicle for ingestion of probiotics in

children. Therefore this study was planned to assess the variations in the levels of *S.mutans* and its serotypes *e,f,k* in saliva before and after a short term daily intake of Probiotic lozenge.

Methodology: A double blind randomized controlled trial was conducted among 6-12 years old children from Udhavikarangal Orphanage. A total of 60 children were included in the study, 30 each in placebo group and Testgroup, who were given lozenge containing probiotic bacteria, twice daily after brushing for one month and a 6 month followup was done. Using PCR and gel electrophoresis the prevalence of *S.mutans* serotypes, the pre and post levels of *S.mutans* on the collected saliva samples was evaluated. The data obtained was subjected to statistical analysis using ANOVA, Post – Hoc, Chi-square, Mann Whitney test and T-test.

Results: The prevalence of serotypes *e,k* was found to be 5% ,12% with the absence of serotype *f*. In probiotic group, there was a significant reduction in *S.mutans* level ($p = 0.00$) at one month intervention. Comparing one month intervention with 6 months follow up there was only a marginal increase in the levels of *S.mutans*.

Conclusion: Probiotic lozenge can be used as an adjunct for the prevention of dental caries as an oral supplement in children at varying risk for dental caries.