SDM
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"COMPARATIVE ANALYSIS OF THE EFFICACY OF *Acacia catechu* AND HiOra MOUTHRINSE IN CHILDREN BELOW 71 MONTHS OF AGE WITH EARLY CHILDHOOD CARIES"

By

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BACKGROUND

ECC is disease of major concern in today's world and prevalent worldwide. It is chronic, infectious disease affecting young children constituting serious public oral health problem. It is multifactorial disease consequent to interaction of cariogenic microorganisms, exposure to carbohydrates, inappropriate feeding practices, range of social variables, changing lifestyle, neglect by parents or ignorance etc. Though several preventive methods/measures are in practice, the awareness about the benefits of Ayurvedic preparation and its limited side effects is high. There are various studies showing maintenance of good oral hygiene using Ayurvedic / herbal preparations. Thus, aim of this study was to compare efficacy of Ayurvedic formulations in reduction of the micro-organism causing ECC.

METHODOLOGY:

60 children between zero to 71 months age, with ECC were randomly divided into Group I (n = 20) [control group] Group II (n = 20) [*Acacia catechu* group] and Group III (n = 20) [HiOra group]. Codes were similar to those on the mouthrinse solution and on saliva container. The double blinding method was followed. The baseline microbiological colony count was performed for the *Streptococcus mutans* and *Lactobacillus sps*. after collecting the saliva. Method of mouthrinse usage was demonstrated to every mother. On the 16th day, children were recalled and the salivary samples were collected, labelled identically with their baseline containers and were assessed for microbiological colony count. The results obtained were statistically analysed using non parametric test.

RESULTS

There was significant reduction in TCC between Control Group and Experimental Groups. In the experimental groups ($p>0.05$), the reduction of TCC was greater in HiOra followed by *Acacia catechu*. The reduction in *SM* and *Lactobacillus sps.* showed HiOra group had significant reduction in the *SM* whereas *Acacia catechu* group had significant reduction in both *SM* and *Lactobacillus* count.

Conclusion

Reduction in total micro-organisms is less significant among the experimental groups, indicating that both the experimental groups act equally over micro-organisms count. However the reduction in total colony count was greater in HiOra followed by *Acacia catechu* and the control group showed lesser reduction value.

KEYWORDS

Early Childhood Caries, Ayurvedic preparations, age group, method of mouthrinse usage, Total Colony Count, *Streptococcus mutans, Lactobacillus sps.*.