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**SHRI DHARMASTHALA MANJUNATHESHWARA
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**COMPARATIVE EVALUATION OF REMINERALIZATION
POTENTIAL OF CLINPRO5000, GC TOOTH MOUSSE AND ENAFIX
ON ARTIFICIALLY DEMINERALIZED HUMAN ENAMEL - IN VITRO
STUDY**

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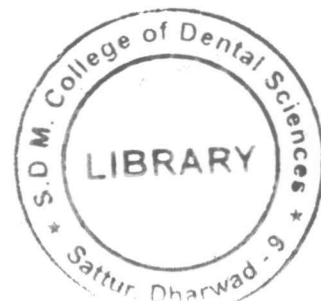
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ABSTRACT

INTRODUCTION:

Dental caries, etiologically is a multifactorial disease because of both bacterial acid production along with the buffering action from saliva and the surrounding surface of the tooth structure earlier visible as White Spot Lesions (WSLs). Remineralization is the process whereby calcium ions and phosphate ions are supplied from an external source to the tooth to promote ion deposition into crystal voids. Evidence shows that early caries lesions can be mineralized in-vitro and in-vivo, with fluoride as one of the most significant agents for promoting remineralization.

AIM: To compare and evaluate the effect of remineralization potential of Clinpro5000,

GC tooth mousse and Enafix on artificially demineralized human enamel – An in vitro study.

MATERIALS AND METHODS: 40 enamel samples were divided into 4 groups. Group A: Tricalcium phosphate (Clinpro5000); Group B: CPP-ACP (GC Tooth mousse); Group C: CaSP (Enafix) and Group D (control) containing dentifrice. All teeth were subjected to demineralization for 24 hours followed by remineralization with respective dentifrice for 30 days and the VHN was assessed.

RESULTS: There was a statistically significant increase in VHN in all 4 groups after remineralization. Tricalcium phosphate group showed a higher mean VHN followed by CPP-ACP and CaSP containing dentifrice.

CONCLUSION: All remineralizing agents showed improved surface remineralization. However, Tri-calcium phosphata showed a better potential for remineralization compared to CPP-ACP and CaSP..

KEY WORDS:

Dental caries, demineralization, remineralization, Tricalcium phosphate, CPP-ACP, Calcium sucrose phosphate, Vickers hardness number.