EFFECT OF CASEIN PHOSPHO PEPTIDE-AMORPHOUS CALCIUM FLUOR PHOSPHATE FOR INHIBITING STREPTOCOCCUS MUTANS GROWTH IN YOUNG ADULT PATIENTS

(EFEK CASEIN PHOSPO PEPTIDE-AMORPHOUS CALCIUM FLUOR PHOSPHATE UNTUK MENGHAMBAT PERTUMBUHAN STREPTOKOKUS MUTANS PADA PASIEN DEWASA MUDA)

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Abstract

Streptococcus mutans is a major caries-causing bacteria, which can aggregate to form plaques. Nowadays, caries prevention approach in the cellular level can be done through molecular technology by using anti-bacterial, antibodies or addition of remineralization agent such as Casein Phospho Peptide-Amorphous Calcium Fluor Phosphate (CPP-ACFP) as an inhibitor of biofilm formation by *Streptococcus mutans*. The purpose of this study was to investigate the role of CPP-ACFP as an inhibitor to the growth of *S. mutans*, when used in low and moderate caries risk patient. The CPP-ACFP paste was applicated to patients for 60 days. Any caries inhibitory effects were evaluated as the difference of *S.mutans* count which was analyzed by *S. mutans* strip count (GC Corp) and colony count was performed with a bacterial culture. The result showed that there was no significant difference between before and after using CPP-ACFP in colony counting by *S.mutans* stripcount (GC Corp), pH, and buffer capacity from saliva.In conclusion, there was no effect after using CPP-ACFP since user didn't use it regularly. To expect better result in using CPP-ACFP preventive treatment, we should improve patient's compliance.

Key words: casein phospho, peptide amorphous, calcium fluor phosphate