EVALUATION OF BACTERIAL COLONIZATION ON DIFFERENT TREATED CERAMIC SURFACES

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ABSTRACT

Objectives: To assess the effect of different finishing techniques of orcelain surfaces on microbial adherence and colonization.

Materials & Methods: Three different types of ceramic materials were subjected to three types of finishing. Microbial adherence and colonization were assessed by optical density using spectronic 21 DV Spectrophotometer to found the best combination. Data was recorded and statistically analyzed using one way analysis of variance (ANOVA) and Scheffe multiple comparison test (p<0.05).

Results: Statistical analysis showed significant differences between mean optical densities of the different types of ceramic materials and also between different finishing techniques of each type.

Conclusions: This study demonstrates that both ceramic type and variations in ceramic finishing and glazing are important factors which may enhance plaque accumulation on dental restorations.

Significance: Finishing technique had a great effect on microbial adherence and colonization which may lead to failure of dental restorations due to recurrent caries and generation of periodontal disease.

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