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A COMPARATIVE EVALUATION OF GINGIVAL MICROLEAKAGE IN CLASS -II CAVITIES RESTORED WITH CONVENTIONAL FLOWABLE COMPOSITE, BULK FILL FLOWABLE COMPOSITE AND FLOWABLE GIOMER IN DECIDUOUS MOLARS.

- AN IN VITRO STUDY

By

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ABSTRACT

BACKGROUND AND OBJECTIVES:

Techniques for posterior restorations are time-consuming and challenging when the restoration margins extend subgingival since they are more prone to increased marginal leakage. Hence, flowable composites have various properties that contribute to good marginal adaptation. Thus, this study aimed to evaluate and compare the gingival microleakage in class-II cavities restored with three flowable composites (conventional flowable composite, bulk fill flowable composite, and flowable Giomer in deciduous molars) in deciduous molars.

METHODOLOGY:

A total of ninety sound extracted deciduous molars, for therapeutic reasons, were selected. On each tooth, modified class II proximal box cavity preparations were made. Samples were randomly divided into three experimental groups, 30 in each group, tofflemire matrix band was applied, on application of 7th generation bonding agent, restorations were done. The finishing and polishing were completed and the samples were subjected to thermocycling. Subsequently, the samples were immersed in 2% methylene blue dye for 24 hours. Samples were sectioned mesiodistally by double-sided diamond disc and microleakage was evaluated under the stereomicroscope.

TABLE OF CONTENTS