THE SEALING ABILITY OF A NEW COLORED COMPOMER MATERIAL IN PRIMARY TEETH

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ABSTRACT

The aim of the present study was to evaluate the sealing ability of a new colored compomer material compared to regular compomers and glass ionomer cements. This was done through micro-leakage assessment and SEM study of the restorative tooth interface. A number of 45 recently extracted primary teeth received class V restorations using 3 materials; Composan glitter, Compoglass F and Fuji IX gp (15 each) after setting and thermocycling. 10 specimens for each material were prepared for the microleakage test using 0.2% basic fuchsin stain. The specimens were then sectioned buccolingually and stain penetration recorded. The other 5 teeth of each material were sectioned hiiccolingually and plated and prepared for the SEM study. All specimens revealed good resistance to microleakage especially the compomer materials. The SEM study revealed good adhesion of glass ionomer to loath dentin and areas of separation in enamel. The compomer materials showed some areas of gap formation along the adhesive interface. It was concluded from this study that the new colored compomer material showed acceptable sealing ability comparable to that of regular compomer and glass ionomer cement.

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