INFRA-RED SPECTROSCOPY OF IN-CERAM CROWN CEMENTED USING THREE DIFFERENT ADHESIVE CEMENTS

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ABSTRACT:

Ceramics have been used for Dental restorations for a long time due to their outstanding esthetics and availability of higher strength. The in-ceram uses alumina core which is infiltrated with glass in the second tiring and then the core is veneered with conventional porcelaip. Adhesive luting agents could provide a clinical benefit in the reduction of Micro-leakage. Also the resin cements were widely used for bonding all ceramic restorations.

The aim of this study was to evaluate the bonding and micro-leakage of the cement In-ceram and cement dentin interfaces using three different bonding cements to determine the nature of bonding.

The results of this study indicatid that there was an evidence of a chemical reactein between the adhesive cements used in this study with In-cerm and dentin interface. The resin cement used showed chemical reaction with In-ceram. In comparing chemical reaction of different luting cement used in this study with dentin it can be concluded that the chemical reaction is not the only factor affecting bonding and microleakage.

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