KUVEMPU UNIVERSITY

An In Vitro Comparative Evaluation of the Tensile Bond Strength at the Two Interfaces of the "Sandwich Technique": Glass Ionomer-Dentine and Glass Ionomer-Composite Resin

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INTRODUCTION

Since their introduction in the early '70s glass ionomer cements have attracted a great deal of attention from the profession because of the unique advantages of biological acceptability, fluoride release, dentine bondability and marginal integrity.

In vitro & in vivo documented data on glass ionomer cements are very impressive and promising. Yet, despite all the excellent characteristics of the cements, they have always been regarded as secondary choices for anterior and posterior restorations.

Slow set, brittleness, poor finishability, lack of translucency, and the technique sensitive nature of glass ionomer cements hardly compare with the composite resins which are easier to handle, polishable and esthetically more acceptable.

Glass ionomers can have an important role as liners or bases under composite resins which can be micro mechanically bonded to the glass ionomer cement. Accordingly glass ionomer cements are currently regarded as ideal dentinal restorative systems, as they bond to and restore the dentine, where as composite materials are infact enamel restoratives.

Recently introduced dentine bonding agents povide a