COMMENTARY

EFFECT OF ZOE TEMPORARY RESTORATION ON RESIN-DENTIN BOND STRENGTH USING DIFFERENT ADHESIVE STRATEGIES

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This study evaluated the potential effect of eugenol in temporary restoration to inhibit the polymerization of resin on two self-etching primers compared with a total-etch two-step adhesive.

The authors explain that the literature has been controversial about the effect of eugenol-containing temporary materials on the bond strength to dentin. Some studies report no effect, while others report a decrease in the bond. However, no studies have been conducted with the use of a self-etching primer.

The authors discuss the possible implications of various powder and liquid ratios and the amount of available eugenol to inhibit polymerization. The use of a larger amount of liquid will result in larger amounts of eugenol, which may result in increased resin polymerization inhibition.

When the authors compare the effect of eugenol between the total-etch and the self-etch adhesives, it is clear that the effect is more pronounced in the self-etch adhesives. The authors explain that this is probably a result of the use of phosphoric acid in pretreatment in the total-etch two-step adhesive. The phosphoric acid and subsequent rinsing potentially removes the eugenol in the smear layer and superficial dentin.

The authors conclude that the use of eugenol-containing temporary materials affects the bond strength of the adhesives tested, mainly of the self-etching primers.

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