COMMENTARY

TWO-YEAR CLINICAL EVALUATION OF REPAIR VERSUS REPLACEMENT OF COMPOSITE RESTORATIONS

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In the current era of widely promoted over-treatment, especially through throw-away tabloids, this study represents a truly clinically relevant project, and the authors should be commended for their efforts.

The current article studied the effectiveness of different alternative treatments to the replacement of composite restorations in preparations of Class III, IV, and V, over a 2-year period. The authors concluded that repairing the margins with a one-bottle total-etch adhesive and a hybrid composite was as effective in preventing marginal staining as replacing the entire restoration. They also found that repairing or sealing the margins of the restoration significantly improved the marginal adaptation, as compared with the group for which no treatment was performed.

Polymerization stresses in resin-based restorations may result in marginal leakage and recurrent caries lesions.[1,2] This may be the reason why secondary caries is still the main reason for replacing restorations.[3,4] Composite resin is used at least twice as frequently as amalgam as a restorative material, and nearly four times as often as GIC-based materials.[3] Taking into account that up to 65% of the restorations placed in a general practice setting are replacements of previous restorations,[4] and that each time a composite restoration is replaced the dimensions of the preparation are increased,[5] the debate on whether to repair or to replace composite restorations is very important for the profession and has gained much interest lately.[6,7] This interest is translated into the effective teaching of composite repair in some US and European schools.[7–9]

Several in vitro studies have been published which reported distinct results when testing techniques for composite repair. Knowing that Single Bond/Filtek Z250 (3M ESPE, St. Paul, MN, USA) resulted in very acceptable results in the present study, we would suggest that the authors further test which combination of current materials used for composite repair would result in better *clinical* performance.

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