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[Image PDF (669K)] [References]

Microtensile Bond Strengths of Composite Cores to Pulpal Floor Dentin with Resin Coating

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Abstract:
The purpose of this study was to evaluate the effect of resin coating on the microtensile bond strength (MTBS) of indirect composite cores to pulpal floor dentin. Thirty extracted human molars with root canal fillings were used. After post space preparation, dentin surface was coated with either Clearfil SE Bond (SE) or SE with Clearfil Flow FX (SE+FX) for the resin-coated groups, while dentin was treated with ED Primer II (ED) for the non-coated group. Indirect composite cores were cemented with either Panavia F2.0 (PA) or Clearfil DC Core Automix (DC). After 24-hour storage, MTBSs were measured at a crosshead speed of 1 mm/min. Two-way ANOVA indicated that the MTBSs of resin-coated groups were significantly higher than those of the non-coated groups. In particular, the SE+FX/DC group exhibited the highest MTBS. It was thus concluded that resin coating enhanced the dentin bond strength of indirect composite cores to pulpal floor dentin.

Key words:
Microtensile bond strength, Composite core, Resin coating

[Image PDF (669K)] [References]

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