

Effect of self-curing activators and curing protocols on adhesive properties of universal adhesives bonded to dual-cured composites

Gutiérrez, Mario Felipe

Sutil, Elisama

Malaquias, Pâmela

de Paris Matos, Thalita

de Souza, Lucas Marques

Reis, Alessandra

Perdigão, Jorge

Loguercio, Alessandro D.

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Objectives To measure microshear bond strength (μ SBS) and nanoleakage (NL) of self-etch universal adhesives under core buildup restorations using different curing protocols, at 24 h and after 6-month water storage. **Methods** Middle dentin of 55 molars was divided into: Clearfil Universal Bond [CFU], Prime&Bond Elect [PBE], and One Coat 7 Universal [OCU]. All-Bond Universal [ABU] and Clearfil SE Bond [CSE] were used as control. CFU, PBE and OCU were: light-cured [LC], dual-cured [DC] and self-cured [SC]. Data were analyzed separately (two-way ANOVA), Tukey's test ($\alpha = 0.05$). **Results** μ SBS: At 24 h OCU/LC resulted in statistically higher μ SBS than ABU. CSE/DC showed statistically higher μ SBS than all DC adhesives. PBE/LC resulted in significant lower μ SBS than the respective DC/SC modes ($p < 0.001$). At 6-month, both CFU and PBE (LC/SC), resulted in a significant decrease in μ SBS. μ SBS for OCU/DC decreased significantly ($p < 0.001$) compared to the respec