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[\[PDF \(3686K\)\]](#) [\[References\]](#)**Microtensile bond strengths of a dual-cure resin cement to dentin resin-coated with an all-in-one adhesive system using two curing modes**[Rena TAKAHASHI](#)¹⁾, [Toru NIKAIDO](#)¹⁾, [Meu ARIYOSHI](#)¹⁾, [Richard M. FOXTON](#)²⁾
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Abstract:

This study evaluated the effect of resin coating using an all-in-one adhesive system on the dentin bond strength of a dual-cure resin cement after different curing modes. Human molars were ground to obtain flat dentin surfaces and divided into three groups: untreated as a control and resin-coated with either a single- or double-application of an all-in-one adhesive (Tokuyama Bond Force). The specimens were bonded to indirect composite disks using a dual-cure resin cement (Bistite II) activated by dual-cure or self-cure modes. Each specimen was sectioned into beams for the microtensile bond strength test. The data were analyzed by two-way ANOVA with Bonferroni's correction ($p=0.05$). Resin coating with a double-application of the all-in-one adhesive system significantly improved the bond strength of the dual-cure resin cement to dentin. In addition, dual-curing of the resin cement enhanced the bond strengths to dentin.

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