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[\[PDF \(938K\)\]](#) [\[References\]](#)**Comparison of Bonding Ability of Single-step Self-etching Adhesives with Different Etching Aggressiveness to Root Dentin**[Andrea V. KANESHIRO](#)¹⁾, [Satoshi IMAZATO](#)¹⁾ and [Shigeyuki EBISU](#)¹⁾

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Abstract:

The aim of this study was to compare the bonding ability of single-step self-etching adhesives with different degrees of etching aggressiveness to root dentin. Composite restorations were placed on sound or caries-affected root dentin using a “strong” (Adper Prompt L-Pop, Absolute) or “mild” (Clearfil Tri-S Bond, Reactmer Bond) system. Immediately after restoration placement and after 24-hour storage in distilled water, the bonding interface was examined by scanning electron microscopy. Microtensile bond strength (MTBS) on sound root dentin was also measured with each storage condition. The adhesives with strong etching aggressiveness demonstrated interfacial integrity immediately after restoration and also after 24 hours of storage. Conversely, the “mild” adhesives showed debonding immediately after restoration. There were no statistical differences in MTBS among the four systems, nor between the two storage periods for each material. For restorations on root dentin using single-step adhesives, “strong” systems were thus recommended as they favorably produced a stable bond since the early stage.

Key words:[Single-step adhesives](#), [Bonding](#), [Root dentin](#)[\[PDF \(938K\)\]](#) [\[References\]](#)Download Meta of Article [\[Help\]](#)

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