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Abstract

[IRIYAMA, Nelson Tetsu](#) et al. Effect of light-curing method and indirect veneering materials on the Knoop hardness of a resin cement. *Braz. oral res.* [online]. 2009, vol.23, n.2, pp. 108-112. ISSN . doi: 10.1590/S1806-83242009000200003.

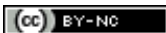
This study evaluated the Knoop hardness of a dual-cured resin cement (Rely-X ARC) activated solely by chemical reaction (control group) or by chemical / physical mode, light-cured through a 1.5 mm thick ceramic (HeraCeram) or composite (Artglass) disc. Light curing was carried out using conventional halogen light (XL2500) for 40 s (QTH); light emitting diodes (Ultrablue 1s) for 40 s (LED); and Xenon plasma arc (Apollo 95E) for 3 s (PAC). Bovine incisors had their buccal face flattened and hybridized. On this surface a rubber mold (5 mm in diameter and 1 mm in height) was bulk filled with the resin cement. A polyester strip was seated for direct light curing or through the discs of veneering materials. After dry storage in the dark (24 h 37°C), the samples (n = 5) were sectioned for hardness (KHN) measurements, taken in a microhardness tester (50 gF load 15 s). The data were statistically analyzed by ANOVA and Tukey's test ($\alpha = 0.05$). The cement presented higher Knoop hardness values with Artglass for QTH and LED, compared to HeraCeram. The control group and the PAC/Artglass group showed lower hardness values compared to the groups light-cured with QTH and LED. PAC/HeraCeram resulted in the worst combination for cement hardness values.

Keywords : Resin cements; Hardness; Composite resins; Dental porcelain.

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