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Abstract

[GUERREIRO- TANOMARU, Juliane Maria](#); [DUARTE, Marco Antonio Húngaro](#); [GONCALVES, Marcelo](#) and [TANOMARU-FILHO, Mario](#). Radiopacity evaluation of root canal sealers containing calcium hydroxide and MTA. *Braz. oral res.* [online]. 2009, vol.23, n.2, pp. 119-123. ISSN . doi: 10.1590/S1806-83242009000200005.

The purpose of this study was to evaluate the radiopacity of root canal sealers containing calcium hydroxide and MTA (Acroseal, Sealer 26, Sealapex, Endo CPM Sealer, Epiphany and Intrafill). Five disc-shaped specimens (10 x 1 mm) were fabricated from each material, according to the ISO 6876/2001 standard. After setting of the materials, radiographs were taken using occlusal film and a graduated aluminum stepwedge varying from 2 to 16 mm in thickness. The dental X-ray unit (GE1000) was set at 50 kVp, 10 mA, 18 pulses/s and distance of 33.5 cm. The radiographs were digitized and the radiopacity compared to that of the aluminum stepwedge using VIXWIN-2000 software (Gendex). The data (mmAl) were analyzed statistically by ANOVA and Tukey's test at the 5% significance level. Epiphany and Intrafill presented the highest radiopacity values (8.3 mmAl and 7.5 mmAl respectively, $p < 0.05$) followed by Sealer 26 (6.3 mmAl), Sealapex (6.1 mmAl) and Endo CPM Sealer (6 mmAl). Acroseal was the least radiopaque material (4 mmAl, $p < 0.05$). In conclusion, the calcium hydroxide- and MTA-containing root canal sealers had different radiopacities. However, all materials presented radiopacity values above the minimum recommended by the ISO standard.

Keywords : Radiology; Radiography; Root canal obturation.

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