Brazilian Oral Research
Print version ISSN 1806-8324

Abstract

VOGT, Beatriz Farias; XAVIER, Cristina Braga; DEMARCO, Fl醧io Fernando and PADILHA, Marcio Sch黩er. Dentin penetrability evaluation of three different dyes in root-end cavities filled with mineral trioxide aggregate (MTA). *Braz. oral res.* [online]. 2006, vol.20, n.2, pp. 132-136. ISSN 1806-8324. doi: 10.1590/S1806-83242006000200008.

The purpose of this study was to evaluate the penetration of three dyes in MTA root-end fillings. In 30 single-rooted teeth, cavities for retrofilling were prepared with an ultrasound appliance and filled with MTA. The specimens were randomly assigned to three groups (n = 10) and immersed in the following solutions: 2% methylene blue (MET), 50% silver nitrate (NIT) and 0.2% rhodamine B (ROD). Two transversal slices (1 mm) of the retrofilling region were obtained and evaluated using the Image Tool 3.0 software to obtain a quantitative evaluation (in mm^2) of the dye penetration around the retrofillings. Data were submitted to statistical analysis using Students *t*-test. The lowest degree of dye penetration was observed for the NIT group, in both slices ($p < 0.05$). Dye penetration was significantly larger in the ROD group when compared to the NIT group, in both slices ($p < 0.05$), and to the MET group, only in slice 1 ($p < 0.05$). Within the limitations of this study, it was concluded that the choice of dye could influence the penetration evaluation in root-end filling studies, and that the NIT had the lowest penetration capacity in the apical dentine.

Keywords : Dental leakage; Dyes; Retrograde obturation.

?abstract in portuguese ?text in english ?pdf in english

Sociedade Brasileira de Pesquisa Odontol鏾ica

Av. Lineu Prestes, 2227
Caixa Postal 8216
05508-900 S鋓 Paulo SP - Brazil
Tel./Fax: +55 11 3091-7810
e-Mail
bor@sbpqo.org.br