Brazilian Oral Research
Print version ISSN 1806-8324

Abstract

GRANDE, Rosa Helena Miranda et al. Adhesive systems used for sealing contaminated surfaces: a microleakage evaluation. *Braz. oral res.* [online]. 2005, vol.19, n.1, pp. 17-22. ISSN 1806-8324. doi: 10.1590/S1806-83242005000100004.

The aim of this study was to compare two adhesive systems (OptiBond FL™ and OptiBond SOLO™) used as a sole material for sealing pit and fissures on contaminated surfaces with respect to microleakage. After acid etching, 56 sound teeth were contaminated with 1 祄 of plasma and randomly divided into 8 groups (n = 7). The adhesives were light activated under two conditions (Optilux VCL-403™ and VCL-500™) for 30 s. Each specimen was exposed to one of the following aging treatments: thermal (4,000 X at 5-55癈 for 60 s) plus load cycling (225,000 X with 83.3 N) or thermal plus load and pH cycling (mineralizing/demineralizing solutions). Then, they were immersed in a 50% $AgNO_3$ aqueous solution, sectioned twice and had dye penetration measured through digitized images. ANOVA methods were used to assess the main effects of the factors as well as their interactions. The results indicated a significant difference between the adhesive systems ($p < 0.05$), suggesting that OptiBond FL™ has a better performance with respect to microleakage and could be used as a sealing material in accidentally moist or contaminated surfaces.

Keywords : Dentin-bonding agents; Dental enamel; Dental leakage; Pit and fissure sealants.

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

Sociedade Brasileira de Pesquisa Odontol髆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