Kebocoran mikro tepi restorasi resin komposit antara aplikasi surface sealant dan bonding agent pasca finishing - polishing. = Marginal microleakage of composite resin restoration with surface sealant andbonding agent aplicationafterfinishingpolishing.

Abstrak

[Latar Belakang: Kebocoran mikro tepi restorasi resin komposit dapat menyebabkan terjadinya perubahan warna dan karies sekunder. Salah satu upaya menguranginya adalah teknik rebonding pasca finishing dan polishing. Tujuan: Menganalisiskebocoranmikrotepirestorasi resin kompositsetelahdilakukanteknikrebondingmenggunakansurface sealant danbonding agent. Metode: 60 gigi premolar dipreparasi pada bagian bukal dengan diameter kavitas 3mm dan kedalaman 2mm. Sampel penelitian dibagi menjadi dua kelompok secaraacakuntukdilakukanrebonding.Kelompok 1 dilakukanrebondingmenggunakansurface sealant dan kelompok 2 menggunakanbonding agent. Pengukuran penetrasi zat warna biru metilen 1% dilakukan setelah thermocycling. Hasil: Terdapat perbedaan yang bermakna (p<0,05) antara jenis bahan rebonding dengan skala kebocoran, dimana kebocoran mikro tepi restorasi paling sedikit terdapat pada kelompok 1 dibandingkan kelompok 2. Kesimpulan: Prosedur rebonding dengan aplikasi surface sealant dapat menutup kebocoran mikro pada tepi restorasi resin komposit pasca finishing dan polishing lebih baik dibandingkan aplikasi bonding agent., Background:Microleakage at the marginal area of composite resin restoration can lead to discoloration and secondary caries. Performing rebonding after finishing and polishing can reduce microleakage of composite resin restoration. Aim: The aim of this study was to analyse the microleakageof composite resin restoration after rebonding with surface sealant and bonding agent. Methods: Cavity preparation was performed on the buccal side of sixty human premolar teeth with 3mm diameter and 2mm depth. Samples were randomly divided into two groups for rebonding with different materials. Samples in group 1 were rebonded with surface sealant, while samples in group 2 using bonding agent. The microleakage was measured using 1% methylene blue after thermocycling procedure. Results: Group 1shows less microleakage than group 2, statistic analysis show significant difference between the two groups (p<0.05). Conclusion: Rebonding procedure with surface sealant can reduce marginal microleakage in composite resin restoration better than bonding agent.]