

**KEBOCORAN TEPI RESIN KOMPOSIT *BULK FILL* SETELAH
APLIKASI BAHAN DESINFEKSI KAVITAS *CHLORHEXIDINE
DIGLUCONATE 2% DAN ALKOHOL 70%***

ABSTRAK

Karies merupakan bentuk kerusakan gigi yang sering dijumpai dalam kehidupan sehari-hari. Perkembangan karies dapat dicegah dengan perawatan restorasi gigi. Salah satu bahan restorasi gigi tersebut adalah resin komposit *bulk fill* dengan tingkat *shrinkage* rendah. Desinfeksi perlu dilakukan sebelum pengaplikasian bahan restorasi komposit. Tujuan penelitian ini untuk mengetahui ada tidaknya kebocoran tepi resin komposit *bulk fill* setelah aplikasi bahan desinfeksi kavitas *chlorhexidine digluconate 2%* dan alkohol 70%.

Penelitian eksperimental dengan rancangan *post test only control group design*. Sampel penelitian 20 gigi premolar yang bebas karies dan tanpa fraktur. Sampel dibagi dua kelompok (10 gigi per kelompok). Kelompok I diaplikasikan *chlorhexidine digluconate 2%* sedangkan kelompok II diaplikasikan alkohol 70%. Kebocoran tepi diukur dengan mengamati kedalaman penetrasi *methylene blue 2%* menggunakan alat mikroskop metallography.

Hasil uji *mann whitney* menunjukkan bahwa terdapat perbedaan kebocoran tepi resin komposit *bulkfill* setelah aplikasi bahan desinfeksi kavitas *chlorhexidine digluconate 2%* dan alkohol 70% dengan signifikansi 0,039 (<0,05).

Kesimpulan: Kebocoran tepi resin komposit *bulk fill* lebih besar pada alkohol 70% daripada *chlorhexidine digluconate 2%*.

Kata kunci: Kebocoran tepi resin komposit *bulk fill*, *chlorhexidine digluconate 2%*, alkohol 70%.

**MARGINAL LEAKAGE OF BULK FILL COMPOSITE RESIN AFTER
CAVITY DESINFECTANT APPLICATION CHLORHEXIDINE
DIGLUCONATE 2% AND ALCOHOL 70%**

ABSTRACT

Caries is a form of tooth decay that is often encountered in daily life. Caries development can be prevented by dental restoration treatments. One such dental restorative material is a bulk fill composite resin with a low shrinkage level. Disinfection is needed to be done before the application of composite restorative materials. The purpose of this research was to know whether there is an microleakage of bulk fill composite resin after application of cavity disinfection material such as chlorhexidine digluconate 2% and alcohol 70%.

This was an experimental research with post test only control group design. The sample of research were 20 premolar teeth. The samples were divided into two groups (10 teeth each group). Group I was applied chlorhexidine digluconate 2% while group II was applied 70% alcohol. Microleakage were measured by observing a methylene blue 2% penetration depth using a metallography microscope.

The result indicated the significant differences microleakage of bulkfill composite resin after application of cavity disinfection chlorhexidine digluconate 2% and alcohol 70% from Mann-whitney test 0,039 ($<0,05$).

Conclusions: Microleakage of the bulk fill composite resin was greater in the 70% alcohol than in the chlorhexidine digluconate 2%.

Keywords: *Microleakage of Bulk Fill Composite Resin, Chlorhexidine Digluconate 2%, 70% Alcohol.*