

PENGARUH JENIS BAHAN *BONDING SELF ETCH* TERHADAP  
KEBOCORAN MIKRO TUMPATAN RESIN KOMPOSIT  
*SILORANE* KAVITAS KELAS I

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh jenis bahan *bonding self etch* terhadap kebocoran mikro tumpatan resin komposit *silorane* kavitas kelas I.

Subjek penelitian menggunakan 18 gigi premolar maksila yang bebas karies, gigi dibagi menjadi 3 kelompok perlakuan masing-masing kelompok terdiri atas 6 gigi. Sampel dipreparasi dengan ukuran 3x3 pada permukaan oklusal dengan bur bulat. Kelompok I dilakukan aplikasi *bonding silorane adhesive system*, kelompok II dilakukan aplikasi *bonding adper prompt L-pop* dan kelompok III dilakukan aplikasi bahan *bonding adper easy one*. Resin *silorane* diaplikasikan secara inkremental lalu dilakukan pemolesan. Subjek penelitian disimpan dalam saliva tiruan selama 24 jam dalam inkubator suhu 37<sup>0</sup> C, dilakukan *thermocycling* suhu 4<sup>0</sup> C dan 60<sup>0</sup> C setiap satu menit diulang sebanyak 25 kali. Subjek penelitian direndam dalam larutan biru metilen 2% di dalam inkubator suhu 37<sup>0</sup> C selama 24 jam, subjek di potong dengan arah sagital menggunakan *diamond disc*. Kebocoran mikro diamati dibawah mikroskop stereo dengan pembesaran 250 kali dan dibuat skoring 0-3. Data yang diperoleh berupa data ordinal dan analisis data dengan *Kruskal- Wallis* test ( $p < 0,05$ ) dan tingkat kepercayaan 95 % .

Hasil penelitian menunjukkan tidak ada perbedaan yang bermakna secara statistik *bonding silorane system adhesive*, *bonding adper prompt L-pop* dan *adper easy one* terhadap kebocoran mikro resin komposit *silorane*. Hasil uji statistik *Kruskal Wallis* tidak ada pengaruh penggunaan jenis bahan *bonding self etch* pada tumpatan resin komposit *silorane* terhadap kebocoran mikro

Kesimpulan penelitian ini adalah tidak ada perbedaan kebocoran mikro kavitas kelas I tumpatan resin komposit *silorane* dengan penggunaan *bonding self etch* yang berbeda.

Kata kunci: *silorane*, kebocoran mikro, *bonding self etch*

**THE EFFECT TYPE OF BONDING SELF ETCH MATERIAL ON  
MICROLEAKAGE OF SILORANE COMPOSITE RESIN  
CLASS I DIRECT RESTORATION**

**ABSTRACT**

The aim of this study was to know the influence of bonding system self etch to microleakage of silorane composite resin class I direct restoration.

Eighteen caries free maxillary premolar teeth divided specimen were divided evenly into three experimental group of six each cavity in the occlusal area were prepared with diamond bur. Group I was bonded with silorane system adhesive, group II was bonded with adper prompt L-pop bonding system and group III was bonded with adper easy one bonding system. The silorane composite resin was placed incrementally and polished with soflect disc. Specimen store in artificial saliva for 24 hours at 37 °C the teeth were thermocycled 4 °C and 60 °C each of 1 minute and were immersed in 2% methylene blue for 24 hours. All teeth were sectioned in sagittal direction and the depth of penetration was scored (0-3). Data obtained were analyzed using Kruskal Walls test at < 0,05 significance level and 95%.

Silorane confidence level there was no significant different microleakage silorane composite resin of class I direct restorations. The result showed no different microleakage of class I direct restorations silorane composite resin with using bonding self etch material

Keyword: silorane, microleakage, bonding self etch