

INTISARI

Obat kumur digunakan untuk membilas rongga mulut untuk menghilangkan bau tak sedap, mempunyai efek terapi dan mencegah karies gigi. Penggunaan obat kumur berdampak pada meningkatnya kekasaran permukaan restorasi di rongga mulut. Tujuan penelitian ini untuk mengetahui perbandingan obat kumur herbal, semi-herbal, dan non-herbal terhadap kekasaran permukaan mahkota gigi tiruan cekat resin komposit indirek.

Dua puluh tujuh sampel resin komposit indirek dengan ukuran diameter 10 mm dan tinggi 2 mm dibagi menjadi tiga kelompok. Seluruh sampel diukur kekasaran permukaannya. Sampel kemudian direndam ke dalam akuades selama 24 jam dengan suhu 37°C selanjutnya sampel direndam dalam tiga kelompok perlakuan yaitu obat kumur herbal, semi-herbal, dan non-herbal. Setiap sampel dalam kelompok perlakuan direndam dalam 30 ml larutan obat kumur selama 60 menit selama 6 hari pada suhu 37°C (simulasi penggunaan obat kumur selama 1 tahun). Kemudian dilakukan pengukuran kekasaran permukaan menggunakan *surface roughness measuring instrument* (Surfcom 120A).

Hasil uji Anava satu jalur menunjukkan terdapat perbedaan yang bermakna antara obat kumur herbal, semi-herbal, dan non-herbal terhadap kekasaran permukaan mahkota gigi tiruan cekat resin komposit indirek ($p < 0,05$). Uji *Post Hoc LSD* menunjukkan terdapat perbedaan kekasaran permukaan yang bermakna antara obat kumur herbal terhadap obat kumur semi-herbal dan obat kumur non-herbal ($p < 0,05$), sedangkan antara obat kumur semi-herbal dan non-herbal terdapat perbedaan yang tidak bermakna ($p > 0,05$). Kesimpulan dari penelitian ini adalah obat kumur semi-herbal menyebabkan kekasaran permukaan mahkota gigi tiruan cekat resin komposit indirek yang paling tinggi dibandingkan obat kumur herbal maupun non-herbal.

Kata kunci : gigi tiruan cekat, resin komposit indirek, obat kumur, kekasaran permukaan

ABSTRACT

Mouthwash is used to rinse oral cavity to eliminate odor, contain therapeutic effect and prevent dental caries. Usage of mouthwash could affect to the increase of surface roughness of intra oral restoration. The objective of this research is to determine the effect comparison of herbal, semi-herbal, and non-herbal mouthwash on the surface roughness of indirect composite resin crown and bridge.

Twenty seven samples of indirect composite resin with 10 mm of diameter and 2 mm of height were divided into three groups. All of samples surface roughness of samples were measured prior to treat. The samples were immersed into aquadest for 24 hours with 37°C temperature, then divided into three treatment groups of mouthwashes which were herbal group, semi-herbal group, and non-herbal group. Each sample in the group was immersed into 30 ml of mouthwash solution for 60 minutes in 6 days with 37°C temperature (simulation of mouthwash usage for 1 year). The surface roughness were measured after treatment using surface roughness measuring instrument (Surfcom 120A).

The result of one-way ANOVA show there is significant difference between herbal mouthwash, semi-herbal mouthwash, and non-herbal mouthwash on surface roughness of indirect composite resin crown and bridge denture ($p < 0.05$). Post Hoc LSD test show there is significant difference of surface roughness between herbal mouthwash to semi-herbal and non-herbal mouthwash ($p < 0.05$), while between semi-herbal and non-herbal mouthwash there is no significant difference ($p > 0.05$). The conclusion of this research is semi-herbal mouthwash could affect surface roughness of indirect composite resin crown and bridge the most compared to herbal and non-herbal mouthwash.

Keyword : crown and bridge, indirect composite resin, mouthwash, surface roughness.