

INTISARI

Resin komposit *nanofiller* merupakan tumpatan estetika yang menjadi pilihan pada masa pandemik. Obat kumur banyak digunakan, yang dapat mempengaruhi stabilitas warna resin komposit *nanofiller*. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh larutan obat kumur Povidone iodine dan Probiotik terhadap stabilitas warna resin komposit *nanofiller*.

Subjek penelitian yang digunakan pada penelitian ini adalah 30 gigi incisivus sentralis atas yang ditambah dengan tambalan kelas IV berbahan komposit *nanofiller*, yang dibagi rata menjadi 3 kelompok yaitu kelompok perendaman dengan larutan Povidone iodine 1%, larutan Probiotik, dan larutan garam fisiologis (*saline*). Setiap subjek dietsa selama 20 detik selanjutnya diaplikasikan olesan Bond ke dalam kavitas, dan kemudian disinari selama 25 detik. Berikutnya komposit *nanofiller* diaplikasikan menggunakan instrumen, kemudian disinari selama 20 detik. Subjek penelitian direndam ke dalam obat kumur Povidone iodine, obat kumur Probiotik, dan larutan *saline* selama 20 detik.

Data hasil penelitian diuji secara statistik dengan uji Anova dan LSD. Hasil uji Anova menunjukkan $p < 0,05$ yang berarti bahwa terdapat perbedaan yang signifikan antar kelompok. Kesimpulan penelitian ini adalah terdapat pengaruh perendaman dalam Povidone iodine, Probiotik, dan *saline* terhadap stabilitas warna tumpatan komposit resin *nanofiller*.

Kata Kunci: Resin komposit *nanofiller*, obat kumur, perubahan warna, *Povidone iodine*, probiotik

ABSTRACT

Nanofiller resin composite is an aesthetic filling of choice during a pandemic. Meanwhile, mouthwash is widely used, which can affect the color of the nanofiller resin composite. The aim of this study was to determine the effect of Povidone iodine and Probiotic mouthwash solution on the color resistance of nanofiller resin composite.

The specimens used in this study were 30 upper central incisors patched with class IV patch made of *nanofiller* composite. The specimens were divided into 3 groups, for the immersion in 1% Povidone iodine solution, Probiotic solution, and saline solution. Each subject was etched for 20 seconds, after which a Bond was smeared into the cavity, before it was light cured for 25 seconds, Nanofiller composite was applied using plastic filling instrument layer by layer, then light cured for 20 seconds. The specimens were then immersed for another 20 seconds in Povidone iodine mouthwash (Group I) , probiotic mouthwash (Group 2), and saline solution (Group 3).

The results of the study were analyzed statistically with the One-way Anova test and LSD. The results of the Anova test showed $p < 0.05$, which indicated that there was a significant difference among groups. It can be concluded that there was an effect of Povidone iodine mouthwash and probiotic mouthwash on the color stability of the nanofiller composite resin.

Keywords: *Nanofiller composite resin, mouthwash, discoloration, povidone iodine, probiotics*