

PENGARUH TEKNIK PEMOLESAN DAN SUHU MINUMAN KOPI TERHADAP PERUBAHAN WARNA RESIN KOMPOSIT NANOHIRID

INTISARI

Bahan tumpatan resin komposit banyak dipakai di kedokteran gigi. Salah satunya adalah tipe nanohibrid yang memiliki kekuatan mekanis tinggi dan estetika yang baik. Resin komposit nanohibrid memiliki kekurangan yaitu perubahan warna. Perubahan warna dapat disebabkan oleh konsumsi minuman yang mengandung zat warna, contohnya kopi. Kopi biasa diminum dalam kondisi suhu yang bervariasi. Beberapa prosedur pemolesan dilakukan untuk mengurangi potensi perubahan warna dan mempertahankan estetika, diantaranya adalah pemolesan teknik *one step* dan *multi step*.

Database yang digunakan untuk mencari literatur dalam karya tulis ini yaitu Science Direct, Scopus, SAGE Journals, Springer, Wiley Online Library, dan Google Scholar. Pencarian literatur menggunakan kata kunci *composite resin discoloration, one step polishing system, multi step polishing system, temperature beverage, coffee*. Literatur diseleksi menggunakan kriteria inklusi dan eksklusi.

Teknik pemolesan *multi step* (Soflex) menghasilkan ketahanan terhadap perubahan warna yang lebih baik dibandingkan teknik pemolesan *one step* (PoGo). Suhu larutan kopi yang tinggi memberikan perubahan warna yang lebih besar dibandingkan suhu rendah.

Kata kunci : *composite resin discoloration, one step polishing system, multi step polishing system, temperature beverage, coffee*

***EFFECT OF POLISHING TECHNIQUE AND COFFEE TEMPERATURE
ON THE NANOHYBRID COMPOSITE RESIN DISCOLORATION***

ABSTRACT

Composite resin restorative materials are widely used in dentistry. One of them is a nanohybrid which has high mechanical strength and good aesthetics. Nanohybrid composite resin has disadvantages such as discoloration. Color changes can be caused by the consumption of drinks containing dyes, for example coffee. Coffee is usually drunk in varying temperature conditions. Several polishing procedures are performed to reduce the potential for discoloration and maintain aesthetics, including one-step and multi-step polishing techniques.

The databases used to search for literature in this paper are Science Direct, Scopus, SAGE Journals, Springer, Wiley Online Library, and Google Scholar. The literature search used the keywords composite resin discoloration, one step polishing system, multi-step polishing system, temperature beverage, coffee. The literature was selected using inclusion and exclusion criteria.

The multi-step (Soflex) polishing technique provides better resistance to discoloration than the one-step (PoGo) polishing technique. The high temperature of the coffee solution gives a greater color change than low temperatures.

Keywords : composite resin discoloration, one step polishing system, multi step polishing system, temperature beverage, coffee