INTISARI

Resin komposit mikrohibrid merupakan hasil pengembangan resin komposit yang disusun oleh kombinasi *filler* makro dan mikro dan memiliki sifat fisis mekanis, estetik, serta adhesi yang baik dan mudah dipoles. Pemolesan merupakan tahap akhir dalam prosedur restorasi untuk mendapatkan permukaan restorasi yang halus, mengkilap, dan bertahan lama dalam rongga mulut. Teknik pemolesan resin komposit dapat dibedakan menjadi teknik pemolesan *one-step* dan *multi-step*. *Narrative review* ini memaparkan mengenai pengaruh teknik pemolesan *one-step* dan *multi-step* terhadap kekasaran permukaan resin komposit mikrohibrid.

Database yang digunakan untuk mencari literatur dalam penulisan *narrative review* ini adalah PubMed, Ovid, Web of Science, Science Direct, Google Scholar, dan Cochrane. Pencarian literatur menggunakan kata kunci *microhybrid resin composite, microhybrid composite resin, microhybrid restorative material, microhybrid dental composite, polishing, polishing system, polishing method, polishing procedure, polishing technique, surface roughness, surface smoothness, surface properties, one-step polishing*, *multi-step polishing*, dan *polishing materials* yang dipadukan menggunakan *AND* dan *OR* dengan sistem Boolean. Literatur diseleksi menggunakan kriteria inklusi dan eksklusi dan didapatkan sebanyak 6 jurnal utama dan 11 jurnal pendukung.

Perbedaan jumlah langkah kerja saat prosedur pemolesan dapat mempengaruhi hasil restorasi. Pemolesan dengan teknik *multi-step* menunjukkan tingkat kekasaran permukaan yang rendah karena jumlah langkah kerjanya yang lebih banyak. Selain itu tingkat kekasaran permukaan restorasi juga dipengaruhi oleh pemilihan alat poles dan komposisi resin komposit yang digunakan.

Kata kunci: resin komposit mikrohibrid, teknik pemolesan *one-step*, teknik pemolesan *multi-step*, kekasaran permukaan

ABSTRACT

Microhybrid composite resins are the result of the development of composite resin which is composed of a combination of macro and micro fillers and has good physical-mechanical properties, aesthetics, and adhesive, also are easy to polish. Polishing is the final step in the restoration procedure to obtain a smooth, glossy, and durable restoration surface in the oral cavity. Composite resin polishing techniques can be divided into one-step and multi-step polishing techniques. This narrative review describes the effect of one-step and multi-step polishing techniques on the surface roughness of microhybrid composite resins.

The databases used to search for literature in writing this narrative review are PubMed, Ovid, Web of Science, Science Direct, Google Scholar, and Cochrane. Search literature using keywords microhybrid resin composite, microhybrid composite resin, microhybrid restorative material, microhybrid dental composite, polishing, polishing system, polishing method, polishing procedure, polishing technique, surface roughness, surface smoothness, surface properties, one-step polishing, multi-step polishing, and polishing materials combined using AND and OR with the Boolean system. The literature was selected using inclusion and exclusion criteria and obtained as many as 6 main journals and 11 supporting journals.

The difference in the number of work steps during the polishing procedure can affect the restoration results. Polishing with a multi-step technique shows a low level of surface roughness due to the higher number of steps. In addition, the level of surface roughness of the restoration is also influenced by the choice of polishing instrument and the composition of the composite resin used.

***Keywords**: microhybrid composite resin, one-step polishing technique, multi-step polishing technique, surface roughness*