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KOMPOZITA

POLISHING-DEPENDENT CHANGES IN COLOR AND GLOSS
OF COMPOSITES

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Abstract

Purpose: The color and gloss of four different resin composites were evaluated following various steps in finishing and polishing.

Methods: Twenty specimens (10-mm diameter, 3-mm thick) were made from each of four composites: microfill (AI10), microhybrid (Z250), packable (PEO), and nanoﬁll (EXM 612). Specimens were polished at four different stages according to polishing (PCP): I) Unpolished (control), II) polished with a rubber prophylaxis cup and 30s grit polishing paste (PCP); III) reﬁnished with a carborundum bur, then smoothed with Soflex discs (BS); IV) reﬁnished and smoothed (as in III), then polished with hydrophobic cup and paste (BSP). Color and gloss of each specimen was then measured using a colorimeter and a small-angle glossmeter, respectively. Instrument and BS coordinate values were recorded. A average value was considered to be a poor match. Gloss was measured in gloss units (GU). Data were analyzed by analysis of variance and Fisher’s LSD test at the 0.05 level of signiﬁcance.

Results: The color difference among the composites tested was greatest between the microﬁll and the nanoﬁll composite. Instrument and BS coordinate values were recorded. A average value was considered to be a poor match. Gloss was measured in gloss units (GU).

Keywords: resin, polish, color, gloss, colorimeter

Kljucne reči: kompozit, poliranje, boje, sjajnost, kolorimetar