COLOR CHANGE DIFFERENCES DUE TO SOAKING IN 0.2% CHLORHEXIDINE GLUCONATE MOUTHWASH ON NANOFILLED AND HYBRID COMPOSITE RESIN

Madrigayani Anugrah Salfi Putri[1], Syamsiah Syam[2], Nurfadhilah Arifin[3], Ika Shabrina[4], Ilmianti[5]
[1]Department of Conservation, University Muslim of Indonesia, Indonesian
[2]Department of Dental Material, University Muslim of Indonesia, Indonesian
[3]Faculty of Dentistry, University Muslim of Indonesia, Indonesian

BACKGROUND :
Hybrid composite resin material is currently widely used because its surface smoothness is better than that of small particle composite resin, with aesthetics comparable to microfilled composites for anterior restorations. With the development of materials over the years, nanofiller composite resin has become a commonly used filling material due to its advantages: it is more aesthetic, smoother, easy to polish, and has better strength compared to other types of composite resins. However, it may experience color change over time. This color change is caused by prolonged use of 0.2% chlorhexidine gluconate mouthwash.
Objective: To determine the color change due to immersion in 0.2% chlorhexidine gluconate mouthwash on nanofiller and hybrid composite resins.
Method: This study is a quasi-experimental study. Color change measurement was performed using a camera and analyzed with Adobe Photoshop® software, and sample evaluation was measured using the CIE Lab system with L*, a*, b* values.
Results: Based on the Independent Samples T-Test, a p-value < 0.05 (0.000 < 0.05) was obtained, indicating a significant difference in color change due to immersion in 0.2% chlorhexidine gluconate mouthwash between nanofiller and hybrid composite resins.
Conclusion: Hybrid composite resin has a higher color change value than nanofiller composite resin after immersion in 0.2% chlorhexidine gluconate mouthwash.

Keywords: ***Nanofiller*****,** ***Hybrid*****,** ***Chlorhexidinegluconat*** **0,2%, Color changes.**