DETEKSI PERUBAHAN WARNA RESIN KOMPOSIT HIBRID
SETELAH DIRENDAM KlorHEKSIDIN GLUKONAT 0,2 %
MENGUNAKAN SENSOR FOTODIODA

(DETECTION OF HYBRID COMPOSITE RESIN COLOR CHANGE
AFTER IMMERSION CHLORHEXIDINE GLUCONATE 0,2%
USING PHOTODIODE SENSOR )

ABSTRACT

Background. Teeth restoration material requirement is not changed color in a long time and that is composite resin, especially for the anterior or posterior use, hybrid composite. Chlorhexidine gluconate 0,2% as mouthwash can cause discoloration of teeth and teeth restoration material. Purpose. The aim of this study was to know the begining time of color changes detection by photodiode sensor from hybrid composite resin after immersed in chlorhexidine gluconate 0,2% at 2 minute of interval time. Method. This research was laboratoris experimental descriptive with pre and post test control group design. Sample immersed at artificial saliva (pre test), measured by photodiode sensor and then the same sample was immersed in chlorhexidine gluconate 0,2% at 2 minute of interval time, measured by photodiode sensor until get the result of the beggining time of color changes and analyzed by Anova Repeated Measure. Result. There was a significant difference (p<0,05) of composite resin color change after immersed in chlorhexidine gluconate 0,2% for 34 minute, 44 until 78 minute. Conclusion. The colour changes detected by photodiode sensor from hybrid composite after immersed in chlorhexidine gluconate 0,2% beggining at 34 minute.

Key words: hybrid composite resin, chlorhexidine gluconate 0,2%, photodiode sensor, color change