EFEKTIVITAS MENYIKAT GIGI DENGAN MENGGUNAKAN PASTA GIGI EKSTRAK ANGGUR (*Vitis vinefera)* TERHADAP PENURUNAN PLAK PEMAKAI ORTODONTI CEKAT

THE EFFECTIVENESS OF BRUSHING TEETH USING GRAPE EXTRACT TOOTHPASTE (*Vitis vinifera)* TO DENTAL PLAQUE REDUCTION ON FIXED ORTHODONTIC PATIENTS

ABSTRACT

Background. *Components of fixed orthodontic appliance like bracket, tube, band, arch wire and auxiliaries causing cleaning procedure of oral cavity became more difficult. This condition resulted in significant plaque accumulation around the bracket bases. The addition of grape extract in toothpaste was expected to inhibit the accumulation of dental plaque on tooth surface.****Purpose.****The purpose of this study was to evaluate the effectiveness of brushing teeth using grape extract toothpaste to dental plaque reduction on fixed orthodontic patients.****Method.****Thirty three dental student of Airlangga University were chosen to brush their teeth without using toothpaste, with using placebo toothpaste and grape extract tooth paste. They were instructed to brush their teeth using bass method. The samples were not allowed to eat and drink in the next 4 hours after they had brushed their teeth. After applying disclosing agent, plaque was scored using Orthodontic Plaque Index.****Result.*** *The statistical analysis was done by using ANOVA Repeated Measure Test. The average of dental plaque score on samples used no toothpaste, plasebo toothpaste and grape extract toothpaste were 50,9652, 40,6215 and 30,8558. Samples who brushed their teeth without using toothpaste, with using plasebo toothpaste and grape extract tooth paste had p value = 0,000 < α = 0.05. It meant that there was significantly difference in plaque after tooth brushing with no toothpaste, with placebo toothpaste and grape extract toothpaste.* ***Conclusion.*** *Brushing teeth using grape extract toothpaste was effective to reduce of dental plaque on the fixed orthodontic patients.*

Keywords: *Grape extract toothpaste, dental plaque, fixed orthodontic patients*