PASTA GIGI ANTIBAKTERI DARI TANAMAN GAMBIR (Uncaria gambir Roxb) SEBAGAI PENGHAMBAT PERTUMBUHAN PLAK PADA PEMAKAI PERANTI ORTODONTI CEKAT

(THE ANTIBACTERIAL TOOTHPASTE MADE FROM GAMBIR (Uncaria gambir Roxb) TO INHIBIT THE GROWTH OF DENTAL PLAQUE IN FIXED ORTHODONTIC PATIENTS)

ABSTRACT
Background: Oral hygiene is more difficult for orthodontic patients compared with individuals with normal dentition. Fixed orthodontic appliances cause a rapid increase of dental plaque volume due to the components of fixed orthodontic appliances. The addition of gambir extract in toothpaste is expected to inhibit the growth of dental plaque. Purpose: The purpose of this study was to know that the antibacterial toothpaste made from gambir to inhibit the growth of dental plaque in fixed orthodontic patients. Method: This research was done in Faculty of Dentistry students, aged 18-24 years, have been wearing fixed orthodontic appliances 1-2 years. They were instructed to brush using bass method. At first they brushed using placebo toothpaste and the second with gambir extract toothpaste. The score was taken 4 hours after brushing. Plaque was scored with Orthodontic Plaque Index (OPI). The statistical analysis was done by using paired T-test. Result: The average of dental plaque score after brushed with placebo and gambir extract toothpaste were 41.51 and 24.11. The paired T-test showed that dental plaque after brushing with the placebo and gambir extract toothpaste had p value = 0.000 < α = 0.005. It meant that there was significantly difference in plaque after tooth brushing with placebo and gambir extract toothpaste. Conclusion: Toothpaste containing gambir extract can reduce the dental plaque in fixed orthodontic patients.

Keywords: Gambir extract toothpaste, dental plaque, fixed orthodontic patients.