

ABSTRACT

Fixed orthodontic is an orthodontic appliance attached to teeth and has a different design from the removable ones. Fixed orthodontic appliance may lead to the accumulation of plaque in the oral cavity and difficult to clean just by rinsing. The simplest control of plaque is by brushing. The use of toothpaste containing herbs may inhibit plaque formation. The purpose of this study was to determine the decrease in plaque scores between the use of herbal toothpaste and toothpaste non-detergent on fixed orthodontic appliance users.

This study used a clinical experimental design conducted on 16 people who were divided into 2 groups. Each group was given the same treatment using toothpaste which is different in each group. Subjects were instructed to brush their teeth with a toothbrush of orthodontic with bass method for 2 minutes. Group A uses Herbal toothpaste then measuring plaque scores before and after brushing the teeth. Group B performed the same way, but make use of non-detergent toothpaste. Plaque index used was the Bracket Bonded Index (BBI), and then the results were tested by paired sample T-test and independent sample T test.

Different test results of plague differences before and after between herbal toothpaste and toothpaste of non-detergent using independent sample T test was equal to 0.000 ($P < 0.05$) meaning that there is a difference of the two differenced in treatment outcome. The conclusion shows that the herbal toothpaste can reduce plaque more than toothpaste of non-detergent.

Key words: fixed orthodontic appliance, plaque index, herbal tooth paste, tooth paste of non-detergent.