ABSTRACT

Traumatic ulcer is one of the most frequent types of ulcers that occur in the oral cavity, it's caused by trauma. Ulcers usually followed with pain, so it must be treated immediately. Drugs that are usually uses is topical corticosteroids Kenalog in Orabase®, but these drugs can cause immunosuppressive effects. Pineapple is one of the medicinal plants that can help the healing of wounds, it is containan bromelain enzymewhich is mostly found in stem pineapple. The purpose of this study was to determine the effect of stem pineapple juice towards healing process of traumatic ulcer which is observed by the average of collagen density.

Experimental studies in vivo with post-test only design was performed on 30 male wistar rats, they were divided into 5 groups: aquadest, Kenalog in Orabase®, stem pineapple juice 1%, stem pineapple juice 3%, stem pineapple juice 5%. The healing of the ulcer were observed by the collagen density and thenthe data were analyzed by One-way ANOVA and continued with Post-hoc LSD.

The results showed the density of collagen in the aquadest group (7.32%), Kenalog in Orabase® (9.93%), stem pineapple juice 1% (11.38%), stem pineapple juice 3% (14.86%), stem pineapple juice 5% (17.97%). Test Results of One-way ANOVA test is p=0.00, which means that there are influence of stem pineapple juice 1%, 3% and 5% to traumatic ulcer healing. Post-hoc LSD test result shown that there are significant differences between the mean of collagen density (p < 0.05) between each groups.

It concluded that there are the effect of stem pineapple juice towards healing process of traumatic ulcer which is observed by the average of collagen density.

Keyword: Stem Pineapple, Traumatic Ulcer, Wound Healing, Collagen