THE MANGOSTEEN RIND EXTRACT’S (Garcinia mangostana L.) EFFECTIVENESS AGAINSTS ACCELERATION OF PROLIFERATION FIBROBLAST ON CHRONIC TRAUMATIC ULCER MICE (Mus musculus) ORAL MUCOSA

ABSTRACT

Background: Traumatic ulcer is often found on oral Mucosa, and trauma is the most common etiology. Ulcer can be divided into acute and chronic. Chronic ulcer is characterized by a chronic inflammatory cell infiltrate one of which lymphocyte. Herbal treatment of mangosteen rind extract is one of the alternative in chronic traumatic ulcer healing. In mangosteen rind extract there is a compound xanthone which appears as an anti inflammatory in chronic traumatic ulcer. Its anti inflammation function may accelerate the proliferation of fibroblast in chronic traumatic ulcer healing, so that the process time could be minimized. Purpose: Accelerating the healing process of fibroblast proliferation on chronic traumatic ulcer mice oral mucosa. Methods: A whole research sample divided into seven group. Group 1 was control, group of 2 was given 3,125% extract concentration, group of 3 was given 6,25% extract concentration, group of 4 was given 12,5% extract concentration, group of 5 was given 25% extract concentration, group of 6 was given 50% extract concentration and group of 7 was given 100% extract concentration of mangosteen rind. Results: Group with 12,5% extract concentration of mangosteen rind on the second day showed the most significant acceleration of fibroblast proliferation on chronic traumatic ulcer mice oral mucosa. Conclusion: The mangosteen rind extract in all of concentration could accelerate the fibroblast proliferation on chronic traumatic ulcer mice oral mucosa.

Keyword: mangosteen rind extract, anti inflammatory, proliferation of fibroblast, chronic traumatic ulcer