ABSTRACT

Background. Tooth extraction is a process of dental removal from the socket. Generally, wounds after tooth extraction can be easily cured. One that plays an important role in wound healing is angiogenesis. Within a few decades, global society had a tendency to return to nature because of the high price of medicine. This research examined Beta-carotene, anthocyanin and chlorogenic acid in purple sweet potato (Ipomoea batatas l poir) can increase the amount of endothelial cells in assisting the wound healing process. Purpose. To determine the effect of purple sweet potato extract 10% on the number of endothelial cells of blood vessels angiogenesis on post-tooth extraction sockets of marmot. Method. Extract of purple sweet potato formed into a gel with a mixture of CMC Na. Cavia cobaya divided into 2 groups: control group with CMC Na and the other group with the extract of sweet potato. Cavia cobaya left incisor teeth was extracted and decapitated after the application of sweet potato extract gel and the histopathological evaluation was performed after, to count the amount of endothelial cells among groups. Result. 10% concentration of purples sweet potato extract can increase endothelial cell in socket of marmot post tooth extraction on the third day, fifth day and seventh day. Conclusion. The purple sweet potato extract can increased the number of endothelial cells in post tooth extraction socket of marmot on the third day, fifth day, and seventh day.

Keyword : Purple sweet potato extract, Angiogenesis, Tooth extraction.