

ABSTRACT

EFFECT OF SAND SEA CUCUMBER (*Holothuria scabra*) EXTRACT ON THE AMOUNT OF FIBROBLAST ON TOOTH SOCKET AFTER TOOTH EXTRACTION ON *Cavia cobaya*

PENGARUH EKSTRAK TERIPANG PASIR (*Holothuria scabra*) TERHADAP JUMLAH SEL FIBROBLAS PADA SOKET PASCA PENCABUTAN GIGI *Cavia cobaya*

Background: Tooth extraction is a common procedure in dentistry, in which the extraction procedure will result in a wound on the tooth socket. A long wound healing process may caused complications such as bleeding, swelling, dry socket and spreading of infection. The use of herbal medicine can help minimize the complications and helping in the wound healing process. The chondroitin sulfate contained in sand sea cucumber can increase the amount of fibroblast cells which can help the healing process. ***Purpose:*** To investigate the effect of the application of sand sea cucumber (*Holothuria scabra*) extracts on wound healing process after tooth extraction. ***Methods:*** sand sea cucumber extracts was made into gel with CMCNa. *Cavia cobaya* was divided into 4 groups based on concentrations: 40%, 60%, 80% and a Control group. The left incisive tooth of *Cavia cobaya* was extracted and being executed on the 3rd, 5th, and 7th day after the application of sand sea cucumber extract gel and the histopatological evaluation was performed after, to count the amount of fibroblast cells among groups. ***Result:*** The research proved the effect of sand sea cucumber extract to the increased of fibroblast cells on wound healing. Difference of fibroblast cells showed between control group and dose of 80% sand sea cucumber (*Holothuria scabra*) extract application group. ***Conclusion:*** The application of sand sea cucumber extract can aid the wound healing process by increasing the amount of fibroblast cells.

Keywords: sand sea cucumber (*Holothuria scabra*), wound healing, fibroblast cells