Amount of Neutrophil Cell After 1,6% Longan Seed Aplication Post Tooth Extraction of Cavia cobaya

ABSTRACT

Background: *Healing process after tooth extraction is a normal complex process that occurring in human body. Materials from nature can be used to accelerate the healing process. Longan seed consist of active ingredients such high polyphenols gallic acid, ellagic acid, and corilagin.* ***Aim:*** *To know the differences about neutrophils amount after 1,6% longan seed gel application at 24 and 48 hours aftertoth extraction of Cavia cobaya.* ***Method:*** *Cavia cobaya was divided into two control group and two treatment group with 1,6% concentration of longan seed gel. Gel was aplicated to the socket of Cavia cobaya. After 24 and 48 hours, histopathology preparation was made from post extraction socket by using Haematoxilin Eosin (HE) staining. The amount of neutrophil was counted using graticulai method with 400 magnification microscope. Data was analyzed by one way ANOVA test and followed by Tukey-HSD.* ***Result:*** *There was increasing of neutrophil amount at 24 hours group and decreasing of neutrophil amount at 48 hours group. The result of one way ANOVA test show the significant value $p<0.05$ and from HSD test there was significant differences between treatment and control group.* ***Conclusion:*** *Neutrophil cells count post tooth extraction of cavia cobaya after longan seed gel application increased in 1.6 % concentration on a 24 hours observation and decreased on 48 hours observation .*

Key words: *Neutrophyl cell, wound healing, euphoria longan seed*