

**Effect of Topical *Ellagic Acid* to The Healing Process of Wound Incision on Rats (*Rattus norvegicus*) Infected by *Staphylococcus aureus***

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**ABSTRACT**

This research was conducted to know the effect of *ellagic acid* for wound healing incision on rats (*Rattus norvegicus*) infected by *Staphylococcus aureus*. Thirty male rats, wistar strain, 3-4 months old, weighing around 150-200 grams, divided into three treatment groups. P0 (rats given incision wound without infected by *Staphylococcus aureus* and without treatment), P1 (rats given incision wound, infected by *Staphylococcus aureus* and treated with 2% *Chloramphenicol*), P2 (rats given incision wound, infected by *Staphylococcus aureus* and treated with 1% *ellagic acid*). Macroscopic and microscopic observation of healing process done on two times, the first observation were after 7 days on 5 rats in each group, and the second observation were after 14 days on the 5 other rats in each group. Analysis by Kruskal-Wallis Statistic Method and Mann Whitney test showed macroscopic observation after 7 days on P0 and P2 were not significantly different, with mean score of P0 and P2 was higher than P1. Microscopic observation after 7 days showed P2 had the highest mean score. Macroscopic observation after 14 days showed P0, P1 and P2 had the same mean score. Microscopic observation after 14 days showed P1 and P2 had the highest mean score. In conclusion was treatment by 1% *ellagic acid* on incision wound that infected by *Staphylococcus aureus* could accelerate healing process on rats (*Rattus norvegicus*).

**Keywords** : Rat, *ellagic acid*, wound healing, *Staphylococcus aureus*