

**The Effects of *Ketapang* Leaf's Extract (*Terminalia catappa* L.) in Various Concentrations towards The Angiogenesis of an Injury in Post Tooth Extraction of a *Wistar* Rats**

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**ABSTRACT**

**Introduction:** Tooth extraction is one of minor surgical procedures by removing the tooth from socket in alveolar bone. Tooth extraction process will cause an injury. *Ketapang* (*Terminalia catappa* L.) is one of herbal plants which contains *flavonoids* that plays a role in the injury healing process. The *Flavonoids* in *ketapang* can accelerate the injury healing in angiogenesis process by stimulating the growth factors of vascular endothelial. **Purpose:** To find out the effects of *Ketapang* leaf's extract in various concentrations towards the angiogenesis of an injury in post tooth extraction of a wistar rat. **Methods:** This research used 45 *Wistar* rats which were divided into three treatment groups; which was applied with Na-CMC, *ketapang* leaf's extract 10%, and *ketapang* leaf's extract 15% was given topically 0.3 mg / kgBB every 2 times a day in the tooth socket. The *Wistar* rats was killed with cervical dislocation method. The taking of mandibular system on day 3, 5, and 7 was done in order to make the anatomic histopathic preparations with hematoxylin-eosin colouring. The observation and calculation of the number of blood using a 400x magnification light microscope on five field of view. The data was analyzed using a *Kruskal Wallis* test. **Results:** The *Kruskal wallis* test showed the p value=0.000 (p<0,05), it means there was a significant difference number of blood vessels in all treatment groups. **Conclusions:** Various concentrations of *ketapang's* leaf (*Terminalia catappa* L.) had an effect towards the angiogenesis of the injury in post extraction of wistar rats.

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