PENGARUH APLIKASI EKSTRAK DAUN PEGAGAN (*Centella asiatica*) 10% TERHADAP ANGIOGENESIS LUKA PASCA EKSTRAKSI GIGI

(APPLICATION EFFECT CENTELLA ASIATICA LEAVES EXTRACT 10% ON ANGIOGENESIS POST-TOOTH EXTRACTION WOUND)

ABSTRACT

Background. *Tooth extraction was the most commonly procedure in dentistry. On the wound healing process post-tooth extraction involved angiogenesis. Angiogenesis was a process of new blood vessel development. New blood vessel role to supply nutrients, inflammatory cells, cytokines, chemokines, and molecules that needed in the wound healing process. Centella asiatica leaves extract was being widely studied because Centella asiatica leaves extract contains active ingredients triterpene saponins such as, asiatic acid, madecassic acid, madecassoside, and asiaticoside which could promote wound healing process.* ***Purpose.*** *To study the role of applications Centella asiatica leaves extract 10% on angiogenesis post tooth extraction wound.* ***Method.*** *This study used 14 Wistar rats that were divided into 2 groups, namely control group and the treatment group. Then the two groups were adaptation for 7 days. On the 8th day mandibular left central incicive tooth was extracted. In the control group, tween 80 10% was applied topically, whereas the treatment group Centella asiatica leaves extract 10% was applied topically. After 3 days post tooth extraction, the mandible surrounding socket was cut off.* ***Results.*** *The use of Centella asiatica leaves extract 10% can increase the number of new blood vessels. There were significantly differences in the number of new blood vessels between the control group and the treatment group ($p < 0.05$).* ***Conclusion.*** *Application of Centella asiatica leaves extract 10% could induced angiogenesis in the wound healing process post-tooth extraction.*

Keywords: *wound healing, angiogenesis, centella asiatica*