APPLICATION OF LONGAN PEEL EXTRACT ON GUINEA PIG TOOTH EXTRACTION WOUND TO THE AMOUNT OF FIBROBLAST CELL

APLIKASI EKSTRAK KULIT KELENGKENG PADA LUKA PENCABUTAN GIGI MARMUT TERHADAP JUMLAH SEL FIBROBLAS

ABSTRACT

Background : Longan (*Euphoria longan Lam*) is widely distributed in Southeast Asia, such as China, Taiwan, Vietnam, and Thailand. Longan peel tissues contain high amounts of bioactive compounds, such as phenolic acids, flavonoids, and pholysaccharides dan exhibit antibacterial, antiviral, antioxidant, antiinflammatory, and anticarcinogenic properties. Longan peel extract can suppressed the production of oxidative stress and increasing enzymatic antioxidants activities and reducing inflammatory responds. **Purpose** : This research is to know the amount of fibroblast cell after applicating Longan peel extract on Guinea pig tooth extraction wound at 1,6%, 3,2%, and 4,8% concentration on day 4. **Methods** : This research used 24 Guinea pigs which are divided into 4 groups that given CMC-Na 3% and Longan peel extract at 0%, 1,6%, 3,2%, and 4,8% consentration. The 24 Guinea pigs were executed on the 4th day of application to observe fibroblast cells. The difference in fibroblast amount were analyzed statistically using one-way Anova test and Turkey HSD test. **Result** : The test showed there was significant difference in fibroblast cells amount between control group and treatment group on day 4 (Sig<0.05). **Conclusion** : Application of Longan peel extract at 1,6%, 3,2%, and 4,8% consentrations can increase the amount of fibroblast cells on Guinea pig tooth extraction wound on day 4.

Keyword : Longan, fibroblast, tooth extraction.