PENINGKATAN PROLIFERASI FIBROBLAS PADA LUKA PASCA-PENCABUTAN GIGI DENGAN STIMULASI ELEKTRIK ARUS MIKRO PADA MARMUT *(Cavia cobaya)*

THE ESCALATION OF FIBROBLAST PROLIFERATION AFTER THE APPLICATION MIKRO-ELECTRICAL STIMULATION POST TOOTH EXTRACTION ON GUINEA-PIGS (Cavia cobaya)

ABSTRACT

Background*. Electrical stimulation is used in wound healing, because it contains pyzoelectrical energy that can escalate the number of Fibroblast Growth Factor (FGF) and Transformation Growth Factor β (TGF-β). This Growth Factor can heal the wound faster, because this growth factor can stimulate the production of fibroblast cell, eventhough there's no research about the using of electrical stimulation after tooth extraction.* ***Purpose:*** *The aim of this study is to investigate the felocity of fibroblast's proliferation after the applications of electrical stimulation on guinea-pig.* ***Metho:*** *.This study only use post test control group design. The sample is contained of 14 guinea-pigs which have 2-3 month age, weight 400-500 grams. They're divided into a 2 groups, each of groups contains 7 Cavia cobaya and has a different treatment after the extraction of their tooth. The first group is called control group. In this first group, there's no treatment with the using of electrical stimulation after the extraction of their tooth. The second group is called treatment group. In this second group, after the extraction of their tooth, it is cared by the using of stimulation therapy on the lower incision side.The data were analyzed with Kolmogorov Smirnov test, one way SPSS and Mini Tab* ***Result:*** *The result of all test groups showed p> 0,05. It's showed that the distribution of data is normal. With SPSS and Mini Tab software is showed a significant difference in average of fibroblast cell .* ***Conclusion:*** *The application of electrical stimulation can escalate the number of fibroblast after the tooth extraction on guinea-pigs.*

Key words*: fibroblast cell, microcurrent electrical stimulation, extraction tooth.*