ABSTRACT

Background. Wound healing after tooth extraction was important thing. The process of socket regeneration involved the activity of fibroblasts. During the wound healing process, fibroblasts actively proliferate and form new collagen fibers which will provide the ability of tissues repair and the formation of new tissue. Using of plants as medicine has been widely known, one of them is Strobilanthes crispus, that has effect of wound healing. Strobilanthes crispus leaves contain flavonoids and tannins that act as antioxidants, antibacterial and increase fibroblasts proliferation. Purpose. The aim of this study was to know the effect of Strobilanthes crispus leaves extract on increase the number of fibroblasts in the healing process after tooth extraction in wistar rats. Method. This study used male wistar rats were divided into three groups, each group containing six wistar rats, all groups had tooth extraction and gel application. Control group used gel CMC-Na 3% and other groups used Strobilanthes crispus leaves extract with a concentration of 10% and 20%. Execution held on third, fifth, seventh day by taking the mandible and then made hystopatological preparat and counted of fibroblast cells. The data were analyzed using one-way ANOVA and LSD. Result. on the third day there was significant differences between the control and applications of Strobilanthes crispus leaves extract gel concentrate 10% and 20%, but no significant difference between concentrate 10% and 20%. On the fifth day found significant differences in the control group and concentrate of extract 20%. On the seventh day significant difference was in the treatment group between concentrate of extract 10% and 20%. Conclusions. Aplication of Strobilanthes crispus leaves extract could accelerate wound healing process by increasing the number of fibroblasts in the wound after tooth extraction in wistar rats and the better concentration is 20%.

Keywords : Strobilanthes crispus leaves extract, wound healing, fibroblast