THE POTENTIAL OF ALOE VERA LEAVES JUICE (Aloe vera L) TOWARD WOUND HEALING PROCESS OF INCISION RATS

(Rattus norvegicus)

Zaenaf Hamid

ABSTRACT

The aim of this research was to know the potential of aloe vera leaves (Aloe vera L) juice to promote wound healing process of incision male rats (Rattus norvegicus). Twenty rats were randomly divided into five groups, there were control (without therapy), positive control (povidone iodine 10%), aloe vera leaves juice groups 25%, 50%, and 100% that given topically at three times a day respectively. On the seventh day, all rat were sacrificed for histologic evaluation. Data was obtained by microscopic observation of the wound skin, based on semiquantitative data scoring including angiogenesis, epithelization and inflammatory cells (PMN). The data were statistically analyzed by Kruskal-Wallis test and Mann-Whitney test. The result showed that there were significant different (p<0,05) between treatment groups. Groups that administration with 50% and 100% of aloe vera juice got faster healing process by observation of angiogenesis, epithelization and inflammatory cells (PMN).

Key words: Aloe vera leaves, juice, wound healing