THE EFFECT OF ALOE VERA (Aloe vera L) JUICE ON NUMBER OF FIBROBLAST CELLS ON INCISION WOUND IN RAT (Rattus norvegicus)

Steven Taufic Leo

ABSTRACT

This study aimed to determine the effect of aloe vera leaf juice (SDLB) the incision wound fibroblast cell number in rats (Rattus norvegicus). Study using 25 rats were randomly divided into five groups: P0 (control - : distilled water), P1 (control +: 10% povidone iodine), P2 (SDLB 25%), P3 (SDLB 50%) and P4 (SDLB 100 %). Treatment had been given directly on the incision area topically for seven days. Research refers to a completely randomized design. Statistical analysis used was ANOVA that continues to least significantly difference test if the result of the test is significant at the level of 5%. Fibroblast cell number in the group P0, P1, P2, P3 and P4 are respectively 214, 501, 449, 1451 and 3107. Research shows that increasing the number of fibroblasts SDLB incision in rats. Number of fibroblasts incision on P3 and P4 are significantly different (P <0.05) with P0, P1, P2. Highest number of fibroblasts incision occurred in P4 significantly different (P <0.05) with P3. Further research still needs to be done by using a form of aloe vera gel preparation and observation of the dependent variables focused to the amount of collagen wound incision in rats.

Key words: Aloe vera, fibroblast, healing, wound, incision