



Review Article

WOUND HEALING ACTIVITY OF PREPARED POLYHERBAL FORMULATION

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ABSTRACT

In this study, the effect of prepared polyherbal formulation for effective healing of wound was evaluated by applying excision and incision wound models in healthy albino rats. In the excision wound model, rats were categorized into 3 groups of five rats each. Groups 1 served as controls, Group 2, received standard treatment with Nitrofurazone, while Groups 3 were treated with prepared Polyherbal ointment (study group). The wound-healing activity was assessed by estimating reduction in wound surface area, the time required for complete epithelialization, and skin-breaking strength. Histological study of the granulation tissue was carried out to know the extent of collagen formation in the wound tissue. In the Excision wound model, Polyherbal-treated animals showed significant ($P < 0.001$) reduction in the wound surface area and faster rate of epithelialization as compared to controls (23.17 ± 0.54 days vs 26.26 ± 0.40 days, respectively). Again, rats in three groups of 05 animals each, were studied using incision wound model, where, polyherbal-formulation treated animals demonstrated significantly ($P < 0.001$) higher skin-breaking strength (420.33 ± 5.92 g vs $277.86 \pm 0.3.19$ g). Furthermore, histological studies showed a significantly higher activity in the formulation-treated group. Our present study revealed that the prepared polyherbal formulation possesses a potent wound healing activity, and though less potent than standard Nitrofurazone, could be a good choice of remedy for wound healing.

Key Words: *Excision wound model, Incision wound model, Polyherbal ointment, Histopathological studies*