Original Paper

The effect of hydroalcoholic matricaria chamomilla extract on cutaneous burn wound healing in albino Rats

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Abstract

Background & Objective: On the bases of the antiinflammatory, antimicrobial and antioxidant effects of matricaria chamomilla (chamomile) extract. This study was design to determine the effect of topical hydroalcoholic chamomile extract on burn wound healing in albino Rats.

Materials & Methods: In this experimental study 30 male albino Rats were randomly divided into 3 equal groups, as sham, control (olive oil) and treatment. Second degree burning was induced in 20% of whole surface area of animal body by diving the back of animal into boiling water for 8 seconds. Animals of control group received no treatment. Animals of olive oil and treatment groups were treated topically by olive oil and hydroalcoholic extract dissolved in olive oil twice a day respectively from the first day of burn induction to complete wound healing.

Results: The results showed that there was not significant difference between olive oil and sham groups in all days of experiments. Also there was significant difference in wound healing (p<0.05) between olive oil and treatment groups (62.96±2.70 versus 74.77±2.50) from the day of 20 to the end of experiments.

Conclusion: This study showed that the hydroalcoholic chamomile extract has a treatment effect on burn wound healing in animal model.

Keywords: Wound healing, Second degree burning, Hydroalcoholic Matricaria chamomilla extract, Skin, Rat

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