

The effects of combination of honey, ostrich oil and propolis on skin wound healing in rats

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Abstract

Background & Aim: Only natural materials were used for healing the wounds. As wax honey, ostrich oil and propolis have anti-inflammatory and anti-bacterial effects, this study was launched to investigate their efficacy in skin wound healing.

Methods: In this experimental study, 40 Vistar male rats were divided into 5 groups which included a control group, honey wax group, honey wax and propolis group, honey wax and ostrich oil group, and honey wax and bee wax group. In all 5 groups, wound-surface measuring continued until the 10th day and hydroxyproline of the urine was analyzed on Day 10; and the data were analyzed using SPSS software.

Results: The percentage of recovery was different on the sixth, eighth and tenth days of treatment among all the treated groups and the control group. An evaluation of the analyzed hydroxyproline in the urine also showed a significant difference in all treated groups on the one hand compared to the control group, on the other.

Conclusion: The results of the recovery and percentage and concentration of hydroxyproline in urine, showed the restoration properties of honey not only has a synergistic effect but also accelerates the wound-healing process when used along with ostrich oil and propolis.

Keywords: Wound Healing, Honey, Wax Honey, Propolis, Ostrich oil, Rat