

Abstract

Skin is the largest organ of the integumentary system and has various functions. Burns are one of the most common skin injuries and there is an essential need for a cure with lowest side effects and most efficacy. This study was aimed to show tamarisk honey is an effective choice for burn wound healing. Honey has antioxidant and anti-inflammatory properties. Still now many studies are showing honey can accelerate the wound healing process. Due to the abundance of tamarisk plants in this part of the province and the lack of research on this herb honey in wound healing and according to similar characteristics of tamarisk honey with other honeys, This study was aimed to show wound healing effects of tamarisk honey and compared this honey with silver sulfadiazine ointment as a standard therapeutic way for burn wound healing. In this study we selected 30 rat and then made a scaled wound in their backs. Rats divided in three groups and each group respectively cured with Vaseline, silver sulfadiazine and tamarisk honey. We taked photo from wounds in 0, 3, 7, 14 and 21 day. Then we calculated area of wounds and evaluated wound area changes. Rats euthanized 21 days after inducing burn injury and histopathology samples were collected from burn wounds. Data from macroscopic and microscopic evaluations were analysed respectively with one-way ANOVA followed by the tukey test and kruskal wallis test. Results of this study shows that wound closure percentage of tamarisk honey group is higher than other two groups but statistically significant difference cannot be found between groups. The obtained information from histo pathologic studies showed that reteridge in therphy group with silver sulfadiazine significantly was more from two other groups. But tamarisk honey group in relation to two other groups in vascular orientation gained better point, and in this group the rate of vascular parallelisem with surface of wound significantly was more from two other groups. In therphy group with tamarisk honey, inflammation tensity was less from two other groups, and in relation to Vaseline group was significant. Generally, it seems that tamarisk honey have more healer effects towarded the silver sulfadiazine. Furthermore, it is possible to study the effect of tamarisk honey in incision wounds.

Key words: tamarisk honey, burn, wound healing, rat



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