

Evaluation of effect of mixture of Ghee and *Prosopis farcta* powder on skin wound healing process.

M. Nakhaee Moghadam^{1,*}, N. Mahdavi Shahri², Z. Shahi¹, S. Mohamadi¹, Z. Shahraki Nasab¹

¹Department of Biology, Azad Islamic University of Mashhad, Mashhad, Iran

²Department of Biology, Ferdowsi University of Mashhad, Mashhad, Iran

Background and Aims: Study of pharmacological effect of medicinal plants and natural components in animals is the most important part of ethnopharmacological studies. Medical application of herbal plants for treatment of various diseases has been used in Iran and other countries since prehistoric times. Nowadays herbal Medicine is known as one of the branch of supplementary medicine. In this research, the influence of mixture of Ghee and *Prosopis farcta* powder on skin wound healing in animal model was studied.

Methods: Nine male rats were selected and the hair was shaved from the back of rats and 4 holes were made in each side of rat's body (8 holes in each rat) with punch. Rats were classified randomly into three groups. Group 1 was treated with normal saline as control and groups 2 and 3 were treated with mixture of Ghee and *Prosopis farcta* and Ghee alone respectively, twice a day until the wounds were closed. Wounds were clinically and microscopically investigated. Biopsy samples from wounds were prepared on days 2, 4 and 8. Microscopic sections were stained with Erithrozin- Hematoxilin. The present study was based on microscopical comparison and assessment of control and experimental wounds.

Results: According to statistical analysis, macroscopic results indicated that the holes treated with Ghee and mixture of Ghee and *Prosopis farcta*, significantly had faster process of healing in comparison with control group. Moreover, microscopic studies indicated significant increase in new epithelium thickness.

Conclusions: Results from this experiment showd that mixture of Ghee and *Prosopis farcta* has significant healin effect on wounds in comparison with ghee alone and normal saline.

Keywords: Wound Healing; *Prosopis Farcta*; Ghee