The effect of egg yolk on burn wound healing in Rats

Abstract

Background&Objective: Burning and burn wound are the causes of mortality in the world. The present study was designed to investigate the effect of egg yolk (of hen) on burn wound healing in Rats.

Materials&Methods: In this experimental study, 48 females rats randomly divided in silver sulphadiazin, egg yolk and control groups, respectively. Each of three groups including 16 rats and was selected for 28 days of treatment. After general anesthesia with ketamin and xylazin (ip) an area of the back of rats was burned with red-hot coin and similar grade II burns were created. Control group received no medication. In the second and third groups, the surface of wound was covered daily with sulphadiazine and egg yolk. At the end of the each week, four rats from the each group were scarified by ether and samples were taken from the wound region and were histologically assessed. The samples were stained with Hematoxillin and Eosin and studied quantitively.

Results: Results showed that after 4 weeks the healing of burn wounds in the groups receiving egg yolk and sulphadiazine were similar. But healing of burn wounds within these 2 groups was better than control group. There was no difference between the groups receiving either egg yolk or sulphadiazin.

Conclusion: This study showed that egg yolk can be used as an alternative to sulphadiazin in second degree burn wounds.

Key Words: Healing- Burn Wound- Egg Yolk- Silver Sulphadiazin