Protective effects of mummy remedy on cutaneous burn wound healing

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Objective- Mummy is a natural remedy that is used traditionally in treatment of various kinds of disorders.

Design- Experimental in vivo study

Animal- Four mature male new zeland white rabbits

Procedures- After induction of anesthesia, the animals restrained in sternal recumbency and standard surgical preparation on dorsal surface of chest was performed. Then a cotton band (1×1 cm) was dipped in sulfuric acid 50% and placed on the skin of either side of the spine for 5 min. Right wounds were considered as a control group and left wounds as a treatment group. The right wounds were lavaged with normal saline and the left ones were lavaged with sterile solution of mummy, once a day. 14 and 28 days after creation of cutaneous burn wound, a full-thickness skin samples were taken from wound edge. The samples were stained using hematoxilline-eosine (H&E) routine method and prepared for histopathologic evaluations between control and treatment groups.

Results- At day 14, in control group necrosis and severe wound inflammation with minimal re-epithelization and granulation tissue formation was observed, but in treatment group, degree of necrosis and inflammation substantially was reduced and process of re-epithelization and granulation tissue formation was more obvious. At day 28, wound bed remarkably was filled with healthy granulation tissue and new epithelialization covered the wound surface, in treatment group. While, in control group, despite of new epithelialization and granulation tissue formation, inflammatory reaction with presence of neutrophils was observed in the wound.

Conclusion and Clinical Relevance- Results of this study showed that mummy remedy considerably causes acceleration of cutaneous burn wounds healing.

Key words- Mummy- Cutaneous burn wound- Rabbit

References