عنوان مقاله:

Effect of Sprayed Cultured Autologous Keratinocyte Suspension Used Alone and in Combination with Fibrin Glue to Closure of ۳rd Degree Burn Wounds in Rat

محل انتشار:

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خلاصه مقاله:

Objective- Our point is to determine if the treatment of the ۳rd degree burn wounds makes any difference if sprayed cultured autologous keratinocyte used alone or in combination with Fibrin glue. Design- Animal experimental study. Animals- ۳۰ male Wistar rats. Procedures- Thirty male Wistar rats were selected and their keratinocytes were isolated and cultured from small skin biopsy. Rats were divided randomly into ۳ equal groups and three ۳rd degree burn wounds with ۱ cm diameter were created on their back. Wounds were treated with normal saline (control group), Autologous keratinocyte suspension (AKS) (test group۱) and AKS + Fibrin (AKS+ F) (test group۲) in each rat. The wounds were photographed on selected days (۰, ۳, ۵, ۷, ۱۰ and ۱۴) and the percentage of wounds contraction was calculated with image analyzer. Biopsy samples were taken as well for histological studies on days ۳, ۷ and ۱۴. Results-The results showed faster wound contraction for AKS and AKS+ F groups during ۱۴ days period than control group (PConclusion and Clinical Relevance- Although it can be concluded that fibrin glue could prevent cells from dripping out of the wound and also speed up the wound contraction and extend the inflammation and fibrotic tissue formation, it did not have any effect on fastening the re-epithelialization and granulation tissue formation during ۱۴. days

کلمات کلیدی:

۳rd Degree burn, Fibrin glue, Autologus keratinocyte suspension