

# **Skin Grafting Compared with Conservative Treatment in Patients with Deep Second-Degree Burn Wounds of the Trunk and Buttocks**

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## **Abstract**

**Background:** Burns are among the most common causes of injury and result in long-term morbidity, psychological complications, and reduced quality of life. We aimed to evaluate and compare the results of skin grafting versus nonsurgical treatment in patients with deep second-degree burn wounds of the back and posterior trunk.

**METHODS:** This is a descriptive-analytical cross-sectional study of patients with trunk and buttock burns admitted to Burn Hospital in Shiraz, Iran from 2017 to 2019. The skin surface with burns and the final repaired tissue was measured. The Vancouver Scar Score (VSS) and pigmentation, vascularity, thickness, and pliability were assessed. VSS, pigmentation, vascularity, thickness and pliability were considered as outcomes.

**RESULTS:** Seventy-five patients met the criteria for participation; thirty-two patients had skin grafts. The mean age was  $27.79 \pm 20.03$  yr and 53 patients (70.7%) were male. Scars were compared based on pigmentation, vascularity, thickness, and pliability, which was also statistically significant ( $P < 0.001$ ). The mean of VSS was higher in patients with skin graft than those without graft ( $P < 0.001$ ).

**CONCLUSION:** The mean VSS was significantly higher in patients with grade 2 deep burns who received skin grafting than in patients without skin grafting. Due to the lack of donor sites and the need to prioritize skin grafts in burn patients with high total body surface area, it is better to perform skin grafts on the posterior trunk and buttocks in areas with deep grade 2 burns as a last priority and treat this wound with conservative therapy.

**Key Words:** Skin grafting, Burn, Wounds, Trunk, Buttocks