

[EP326] PREVENTION OF POST-BURN SCARRING USING HYALURONIDASE PREPARATIONS

Natalya Malutina, Andrey Alekseev

Department of Dermal Injuries, Wound and Wound Infection, Russian Medical Academy of Postgraduate Education, Moscow, Russian Federation

Aim: To study effectiveness of a cream containing enzyme hyaluronidase for prophylaxis of scarring in burn convalescents.

Method: The action of cream depends on enzyme included in composition, which increases elasticity of scar-altered sites of skin. The treatment was performed in 30 patients who underwent burns of II-III degrees. Men were 14; women, 16. The average age was 44.3 years. Treatment of patients with risk of scar formation began after healing wounds. Average area scar-altered skin, on which was applied cream, was 537.2 cm². Patients applied cream to their own scars, 2 times a day. Control examination was conducted at 4, 8 and 12 weeks of treatment.

Results / Discussion: The length of applying a cream in the group was on average 67.5 ± 5.7 days. By the end of the course, decrease of scar-altered areas was noted in a half of patients. In 80% of patients: reducing a height of scars and/or increasing its elasticity, normalization of pigmentation, and normalization of vascularization (VSS on average 3,0 ± 0,4 points) were noted. In 20% of patients, hypertrophic scar growth was noted in some areas. All patients pointed out significant decreasing a skin itch in scars, on background of cream treatment. The cream was well tolerated. No local irritant, allergic and sensitizing effects were noted.

Parameter	Visit 0	After treatment
VSS	4.1 ± 0.2	3.0 ± 0.4
Skin itch in scar	100%	33%
Scar-altered skin area (cm ²)	537.2 ± 53.9	274 ± 54.5

Table 1: Average results

Conclusion: Indications for application are changes of skin after self-healing burn wounds of II degree. The duration of treatment by cream may be ranged from 1 to 3 months.