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ANALYSIS OF THE RESULTS OF COMPREHENSIVE CONSERVATIVE TREATMENT OF PATIENTS WITH POST-BURN SCAR DEFORMITIES OF THE UPPER LIMB

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Annotation: In this article, the author proposes a comprehensive conservative treatment of patients with post-burn scar deformities of the upper limb. The effectiveness of treatment was studied in 112 patients who underwent complex conservative treatment. The patients were divided into 2 groups: group 1 consisted of 51 and group 2 61 patients. 93.4% of patients in the main group obtained good and satisfactory results. In the comparison group, these figures were 80.4%. Based on this, the proposed schemes for complex treatment of patients with post-burn scar deformities of the upper limb made it possible to improve the results by up to 13%.

Key words: Scar, post-burn deformity, rehabilitation, upper limb.

Relevance of the study: The issues of rehabilitation of burn convalescents with impaired upper limb functions have not been sufficiently studied. The bases of medical and preventive institutions in the regions have not been determined, taking into account the available water sources where conservative rehabilitation is possible; the effectiveness of many means of conservative rehabilitation (in particular hydrogen sulfide irrigation) has not been studied. The absence of reconstructive surgery departments for the consequences of burns and rehabilitation centers adversely affects the long-term results of treatment and often leads to disability of patients [1, 2]. Prevention and treatment of post-burn deformities is a difficult task. These measures should be aimed primarily at preventing the growth of pathological scars [5, 6]. In case of deformity, delay in surgery is erroneous, however, and early reconstructive surgery in patients may not be effective enough [7]. Before determining the indications for surgery, you should first decide whether it is possible to eliminate contracture through conservative treatment, using all means. It takes a certain amount of time. It is necessary that the scars and the engrafted skin flaps mature, after which in some cases there may be no need for surgery, or its volume will decrease, since the mobility of soft tissues in the joint area will increase. At the same time, the stability and mobility of the engrafted skin flaps will be determined, lines and zones of the greatest tissue contraction will be revealed [1, 4]. Given the high percentage of disability, the approach to the prevention of patients with this pathology is still far from required and needs further improvement.

The purpose of the study: to study the effectiveness of comprehensive prevention of post-burn scar deformities of the upper extremity.

Research materials and methods: The work is based on the results of pre- and post-surgical, conservative treatment of 112 patients aged 7 to 45 years, of which 78 (69.6%) male and 34 (30.4%) female patients. The patients were divided into 2 groups: group 1 (comparison group) 51 (45.5%) and group 2 (main group) 61 (54.5%) patients who received comprehensive conservative treatment. Patients of working age accounted for 92.6%.

The results and their discussions. All patients were prescribed a course of conservative therapy including: massage, magnetic therapy, ultrasound with Contractubex gel, compression gloves. In addition, therapeutic measures in the main group included 10 sessions of balneological treatment in conditions of hydrogen sulfide springs in the Ferghana region.

Hydrogen sulfide baths have a positive effect on the treatment of keloids, hypertrophic scars of the upper extremity. The thickness of the scars decreases by 1.5-2 times, they become softer,

paler, more mobile. Minor wounds heal, and existing trophic ulcers decrease, inflammatory phenomena subside, dermatoses disappear. The growth of scars stops, the latter become softer, more mobile, more elastic [1,3, 5]. Without detracting from the advantages of traditional methods of conservative treatment, it is necessary to note the limited possibilities in replacing deep, medium and large scar deformities of the upper limb. It has been established that magnetotherapy has a dehydrating effect, promotes effective oxygen transport to tissues and its adequate utilization, and also improves microcirculation due to the release of heparin into the vascular bed [3,4,5]. Ultrasound with Contractubex gel enhances the degradation of excess collagen in the scar area. The introduction of Contractubex into the scar area using ultrasound causes the transition of scars from hyper to normotrophic, reduces their density and consistency, and reduces pain sensitivity in the scar area [7]. Compression gloves have a low stretchability of knitted fabric, due to which, with active movements of the brush, the pressure under the product increases. This is the so-called high operating pressure. When the brush relaxes, the pressure decreases to the initial level (resting pressure). The alternation of pressure increases and decreases (working pressure and resting pressure) has a micro-massage effect on the soft tissues of the hand, which activates and stimulates the work of lymphangions and improves lymphatic outflow from the hand. In addition, compression applied to the arm increases the intracranial pressure, which reduces the exit of fluid from the vascular bed into soft tissues and increases the reabsorption of fluid into blood vessels [1,3,4,5]. After the treatment courses, there was a partial resorption of scars, a decrease in the height of scars above the skin surface, a decrease in soreness and itching in the scar area.

Results: A comparative analysis of the results of local comprehensive conservative treatment of scar deformities of the upper limb showed the effectiveness of the developed scheme, including balneological treatments in conditions of hydrogen sulfide springs in the Ferghana region.

Fig. 1. Patient I., 5 months after the burn injury. Hypertrophic scars on the back of the right hand are noted (before treatment).

Fig. 2. The same patient. Long-term result in a year (after the procedure)

Long-term results were studied in 106 (94.6%) of 112 patients. In the main group, 57 (93.4%) of 61 patients received good functional and aesthetic results. And in the control group, these indicators were 41 (80.4%) out of 51.

Conclusions: The application of the developed scheme of complex conservative treatment of scar deformities of the upper limb allows to obtain additional plastic material, compared with the traditional method. At the same time, the stage of operations is reduced and the time of surgical rehabilitation of patients is accelerated. Irrigation of the post-burn scar with hydrogen sulfide baths in the conditions of the sanatorium "Chimion" allows you to prevent the formation of rough, pathological scars of the upper limb.

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