



PREVENTION OF THE FORMATION OF POSTOPERATIVE HYPERTROPHIC SCARS ON THE FACE

Yusupova Dildora Zuhridinovna

Department of Diseases and Injuries of the Maxillofacial Region
Tashkent State Dental Institute

Abdullaev Sharif Yuldashevich

Department of Diseases and Injuries of the Maxillofacial Region
Tashkent State Dental Institute

Khalilov Abdufarrukh Abdufattokhovich

Department of Diseases and Injuries of the Maxillofacial Region
Tashkent State Dental Institute
Tashkent, Uzbekistan

ANNOTATION

To date, the problem of rehabilitation of patients with cicatricial lesions of the facial skin has not lost its relevance. The article is devoted to the prevention of the formation of postoperative hypertrophic scars on the face and their treatment.

KEY WORDS: maxillofacial area, scars, sodium succinate, operation, prevention

RELEVANCE

Until today, the problem of rehabilitation of patients with cicatricial lesions of the facial skin has not lost its relevance. This is due to several factors:

- a high level of injuries and an increase in the number of surgical interventions for congenital malformations, oncological and other diseases in the maxillofacial region;
- the increased demands of patients and surgeons for aesthetic results; improvement of existing diagnostic and treatment methods;
- influence on the psychoemotional sphere, social status and social adaptation of patients.

Analysis of the distribution of rank values in the structure of the morbidity of dermatocosmetological patients indicates that in the general structure of treatment, cicatricial lesions of the face and neck are 25.0%. The highest appealability for cosmetic defects falls on women aged 31-40 and accounts for 21.5% of the total number of patients. Among various social groups of the population, the highest level of attendance was

found among persons of intellectual labor, the ratio of men and women is 33% and 67%. (Panova 0.2008).

As you know, the process of scar formation after damage to the surface layer of tissues during injuries and operations is a biological law and is perceived as an "inevitable evil" by both surgeons and patients. One of the important features of the process of tissue scarring is the fact that the final scar formation is completed several months (and sometimes years) after the operation is performed, and within the same time frame is assessed by the patient (1).

We can conditionally distinguish three main situations in which the process of scar formation (and, therefore, their subsequent assessment) has significant differences. So, with open injuries and their surgical treatment, both the patient and the surgeon are faced with damage that has already occurred by chance, which, on the one hand, actually relieves the surgeon of responsibility for the quality of future scars, and, on the other hand, is perceived



by the patient as the result of accidental circumstances. In urgent and elective surgical operations, when the patient's tissue is dissected with a surgical scalpel, it is usually about saving the patient's health, and often life.

Therefore, the surgeon is concerned, first of all, not with the quality of the future scar, but with how to more successfully solve the main problem of treatment (for example, opening a phlegmon, resecting a tumor, etc.)(2).

In both the first and second cases, after the completion of the main stage of the intervention, the surgeon, applying sutures, is concerned not so much with the quality of the future scar as with how to ensure uncomplicated (primary) wound healing

In most situations, it is this circumstance that creates the necessary conditions for solving the main problem of treatment, allows the patient to be discharged from the hospital in a short time, and therefore is one of the important criteria for the effectiveness of surgical work.

PURPOSE OF THE STUDY

Evaluation of the effectiveness of topical application of a drug based on sodium succinate (HYALUAL) in combination with platelet-rich plasma in wound healing in patients after facial surgery

RESEARCH MATERIALS

The analysis of the results of treatment of 46 patients who were hospitalized in the Department of Adult Maxillofacial Surgery of the TGS clinic for the period 2017-2019, who underwent surgical interventions for facial injuries, was carried out. The distribution was as follows; 38 patients underwent surgery for injuries of the lower jaw and articular process, 8 patients - surgery for the removal of benign tumors of the lower jaw. In the postoperative period, 7 patients had a weeping, sluggish granulating postoperative wound(3).

The patients were divided as follows: Group 1, main - a preparation based on sodium succinate (HYALUAL) was injected into the wound in combination with platelet-rich plasma. Controlgroup 2 – standard suture was performed sing antiseptics(4).

The method of topical application of the preparation based on sodium succinate (HYALUAL) in combination with platelet-rich plasma was as follows: after debridement of the surgical field, treatment of the skin area, the wound was injected with 2 ml of HYALUAL, pre-mixed with its own platelet-rich plasma, which was prepared according to the standard technique immediately before operations. This procedure was carried out twice - just before suturing and on the day of removal (7

days). Photo documentation was used daily as control.

RESULTS AND DISCUSSION.

The results of the analysis of the treatment of patients showed that in the patients of the control group, the edema of the tissues around the wound was stopped on the 4th day, which is longer than in the patients of the main group for 2 days. Cleansing of the wound from pathological exudate in the main group was observed on ... day 3, complete cleansing of the wound in the control group took place on day 5.

Epithelialization in the control group appeared on the 7th day, while in the main group, epithelialization began on the 5th day.

Further observation shows that the scar formed after the use of a preparation based on sodium succinate (HYALUAL) in combination with platelet-rich plasma has a lower tendency to hypertrophy, which is explained by the fact that sodium succinate contained in the preparation performs a unique function of a regulator of physiological and biochemical processes(6).

It has a direct effect on cellular metabolism and influences the transport of free oxygen to tissue.

This ability of sodium succinate to intensify the utilization of oxygen by tissues and the reduction of NAD- (Nicotinamide adenine dinucleotide - a coenzyme present in all living cells is part of the enzymes of the group of dehydrogenases that catalyze redox reactions; serves as a carrier of electrons and hydrogen, which it takes from oxidized substances) - dependent cellular respiration underlies its antihypoxic action.

Hyaluronic acid, in the composition of the drug, plays an important role in tissue hydrodynamics, the process of cell migration and proliferation, as well as in a number of interactions with surface receptors of cells.

And the growth factors contained in platelets enhance the repair processes, the arrangement of collagen fibers is ordered.

CONCLUSION

The use of a drug based on sodium succinate (HYALUAL) in combination with platelet-rich plasma in the prevention of hypertrophic scarring was more effective than standard treatment. This method made it possible to stop the phenomena of local tissue edema, to shorten the time required for wound cleansing, and also contributed to the formation of a thinner, aesthetic scar.



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