International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor
Volume-11| Issue-10| 2023 Published: |22-10-2023|

EXPERIENCE IN TREATING PATIENTS WITH THE CONSEQUENCES OF FACIAL BURNS

https://doi.org/10.5281/zenodo.10043176

Temirov Bulat Sayanovich
Andijan State Medical Institute

Annotation

The article describes the developed algorithm of surgical treatment of patients with post-burn scar deformities of the face. Facial burns can cause serious damage to the skin, soft tissues, and even the bones of the face. This can lead to long-term physical limitations, impaired sensory functions, as well as problems with breathing and swallowing. It is advisable, after the healing of burn wounds of the face, first of all, the elimination of scar microstomy. The next step is to eliminate eyelid inversions and scarring of the nostrils. After that, plastic surgery should be performed locally in stages to eliminate cicatricial deformities of soft tissues of other parts of the face. The study of the long-term results showed the effectiveness and correctness of the algorithm we developed. Practical recommendations are given.

Keywords

burns, faces, microstomies, scarring, deformation, stretching, skin.

Relevance. The problem of facial burns remains an urgent and serious problem in modern society [1,5]. Facial burns can have various causes, including accidents, home accidents, fires, chemical exposures and attacks. It is important to understand that facial burns are of particular importance because of their potentially devastating impact on the physical and emotional well-being of the victims [4,2]. Facial burns can cause serious damage to the skin, soft tissues, and even the bones of the face. This can lead to long-term physical limitations, impaired sensory functions, as well as problems with breathing and swallowing [7,10]. Treatment of facial burns requires long-term and intensive medical rehabilitation, which may include surgical interventions, pain management, physiotherapy and reconstructive plastic surgery [3,6].

In general, facial burns are a serious problem with many physical, emotional and social consequences. Understanding this problem, its prevention and support for victims play an important role in reducing its relevance and improving the quality of life of those who have faced this trauma [9,8].

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor
Volume-11| Issue-10| 2023 Published: |22-10-2023|

The purpose of the study. Development of an algorithm for surgical treatment of the consequences of facial burns.

Materials and methods of research. On the basis of the department of reconstructive surgery of the Andijan Multidisciplinary Regional Medical Center and the private clinic "MK MED", we have developed an algorithm for surgical treatment of patients who have suffered facial burns.

30% of patients had combined cicatricial deformities of the mouth and lip area, leading to microstomy of varying degrees, as well as post-burn cicatricial inversions of the upper and lower eyelids.

For surgical elimination of scar deformities of the face, it is necessary to carry out adequate anesthesia of the operation in the form of inhalation anesthesia. Therefore, following our algorithm, first of all we eliminated scar microstomies under local anesthesia. From the unaffected tissues of the cheek mucosa, the corner of the mouth, scraps were cut out on the feeding legs with a base directed into the oral cavity. Transversely constricting scars were excised and the mandible was redressed until the mouth was fully opened. The wound in the corners of the mouth was closed by mobilizing scraps from the mucosa. The stitches were removed for 10-12 days. The next operation was performed at least 20-22 days later (Fig. 1,2).

Picture 1 .

Picture 2.

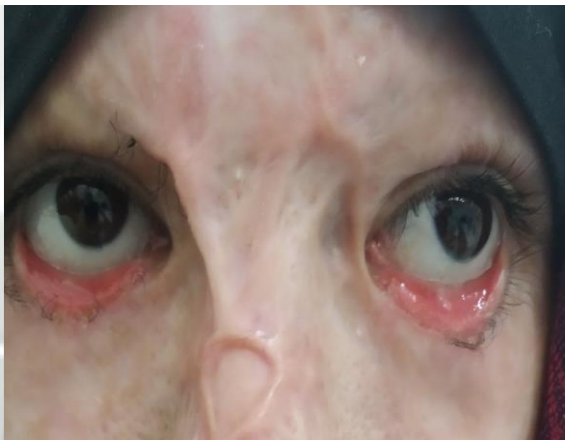
In cases where tracheal intubation was technically difficult due to microstomy after sedation and intravenous anesthesia, the above operation was performed. After that, the anesthesiologist performed tracheal intubation and the next planned volume of surgery was performed under general anesthesia.

Usually the scars ripen within 8-12 months. But with scarring of the eyelids during this period, blindness may occur as a result of drying out of the cornea due to incomplete closing of the eyelids (Figure 3,4). In view of this, the second important point after the elimination of microstomy is the surgical correction of

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor
Volume-11| Issue-10| 2023 Published: |22-10-2023|

eyelid inversions. With a combination of inversions of the upper and lower eyelids, inversions were eliminated at the beginning of the lower eyelids. After complete engraftment of the grafts for 20-25 days, correction of the inversion of the upper eyelids was performed. The study of long-term functional and aesthetic results showed that the most optimal engraftment is observed when taking autoflesh for eyelid surgery from the inner-upper surface of the shoulder.

Picture 3.



Picture 4 .

The technique of the operation. After adequate anesthesia, a transverse incision of the tightening scars is made to the soft tissues, retreating 2 mm from the ciliary edge of the upper eyelid (with plastic surgery of the upper eyelids) and lower (with plastic surgery of the lower eyelids). The ends of the incisions give the appearance of a swallow's tail. Through the ciliary edge with nodular sutures (2-3), we fix the eyelid to the zygomatic area, the lower one to the upper eyelid. The resulting wound was closed with a full-layer autodermotransplant taken from the inner surface of the shoulder. A Pelot bandage was applied over the graft for 10-12 days. Local hypothermia was performed for 5-6 days. Hypercorrection made it possible to avoid recurrence of eversion due to graft retraction (Figure 5,6).

Secondary correction of scar deformities of the paraorbital region is carried out 8-12 months after the primary operation.

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor
Volume-11| Issue-10| 2023 Published: |22-10-2023|

Picture 5 Picture 6

Cicatricial narrowing of the nostrils was performed at least 6-7 months after the healing of burn wounds.

Elimination of scar deformities of the lower third of the face was carried out 8-12 months after the healing of burn wounds. In most cases, after transverse excision of scars on the border with healthy tissues, the wound formed was closed by extensive mobilization of the skin-fat layer of the chin and neck area (Figure 7,8).

In 28 cases, expander stretching of the tissues of adjacent areas was performed, followed by replacement of the wound after excision of the scars with previously stretched tissues. Tissue stretching was performed on an outpatient basis. To restore the eyebrows, 12 cases used a free autoscut graft from the occipital-parietal region.

In 8 cases, plastic surgery was performed with hair-bearing flaps on the feeding leg, by conducting it from the subcutaneous tunnel of the frontotemporal region.

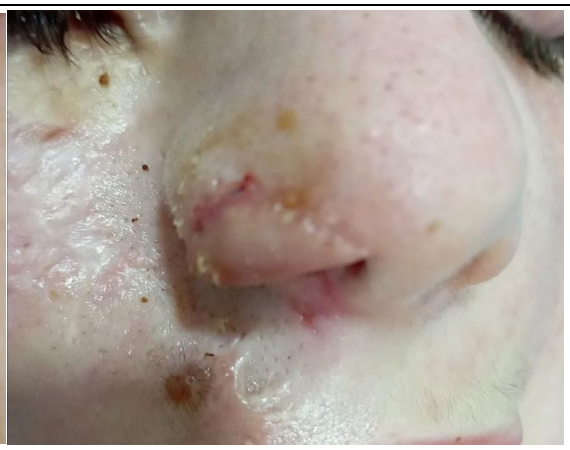

Picture 7 Picture 8

In case of cicatricial lesions of the nasolabial space, we consider the most effective way to replace the constricting scar layer with a full-layer autoderm taken from the inner surface of the shoulder. At the same time, a Pelot bandage was applied over the transplant for 10-12 days.

With defects in the wings of the nose, we transplanted a complex of autoflesh and cartilage taken from the middle-upper part of the auricle to the defect. Local hypothermia was performed for 10-12 days, which is why in almost 100% of cases, complete engraftment of the autodermocartilage graft was observed, with a good aesthetic result. These operations were performed within 18 to 24 months after the healing of burn wounds. (Figure 9.10)

International Journal of Education, Social Science & Humanities.
Finland Academic Research Science Publishers
ISSN: 2945-4492 (online) | (SJIF) = 7.502 Impact factor
Volume-11| Issue-10| 2023 Published: |22-10-2023|

Picture 9



Picture 10

In case of deep scar lesions, plastic surgery with a Filatov stem from shoulder or forearm tissues was used in 25 cases. Biological training in such cases is carried out according to the "accelerated" methodology developed by us in 2014.

All patients underwent an arsenal of physiotherapy procedures aimed at resorption of scars, up to hydrogen sulfide lotions in the conditions of the sanatorium "Chimen" (Ferghana region).

Conclusion. Thus, we consider it expedient, after the healing of burn wounds of the face, first of all, the elimination of scar microstomy. The next step is to eliminate eyelid inversions and scarring of the nostrils. After that, plastic surgery should be performed locally in stages to eliminate scarring of soft tissues of other parts of the face.

The study of the long-term results showed the effectiveness and correctness of the algorithm we developed.

LITERATURE:

1. Alekseev A.A., Tyurnikov Yu.I. The main statistical indicators of the work of burn hospitals of the Russian Federation for 2015 // Materials of the All-Russian scientific and practical conference with international participation "Thermal lesions and their consequences". – Yalta, 2016. – pp. 17-20.

2. Vladimirov I.V., Cherdantsev D.V., Vladimirov D.V., Vanyukhina T.P. Modern possibilities of improving the results of treatment of burn wounds // Modern problems of science and education. – 2014. – № 4; URL: https://science-education.ru/ru/article/view?id=14160.

3. Kayumkhodzhaev A.A., Ten S.L. Soft tissue microvascular autotransplantation of defects in the integumentary tissues of the extremities, head and neck //Uzbekistan surgeons. -1999. -N 1. -pp. 52-55.

4. Madazimov M.M., Grishkevich V.M., Morozov V.Yu., etc. Elimination of scar defects and deformations by tissue stretching //Soviet medicine. -1990. N 7. - pp. 97-101.

5. Simonyan E.V., Osikov M.V., Ageeva A.A., Fedosov A.A. Modern aspects of pathophysiology of thermal trauma // Modern problems of science and education. – 2020. – № 3.;URL: https://science-education.ru/ru/article/view?id=29723

6. Tateladze D.G., Simonov S.N., Gulin AV. The medical and social status of kombustiological patients and the clinical and economic analysis of the results of their treatment. Avicenna's Bulletin. 2017;19(1):57-62. Available from: http:// dx.doi.org/10.25005/2074-0581-2017-19-1-57-62 .

7. Fayazov A.D. Principles and ways to improve the results of surgical treatment of severely burned. Autoref. dis. ... Doctor of Medical Sciences. Tashkent 2007;8. Bhattacharya S. Etiology and classification. In: Sarabahi S, Tiwari VK, Goel A, editors. Principles and practice of burn care. 1st ed. New Delhi (India): Jaypee Publishers; 2010. pp. 25-36.

9. Duclert-Bompaire M, Sallot A, Lardy H, Le Touze A. L'expansion cutanée chez l'enfant: indications et gestion des complications. Notre expérience sur 10 ans [Tissue expansion in children: Indications and management of complications. A 10-year experience]. Ann Chir Plast Esthet. 2017 Apr;62(2):146-155. French. doi: 10.1016/j.anplas.2016.02.003.

10. Gao G, Li W, Chen X, Liu S, Yan D, Yao X, Han D, Dong H. Comparing the Curative Efficacy of Different Skin Grafting Methods for Third-Degree Burn Wounds. Med Sci Monit. 2017 Jun 1;23:2668-2673. doi: 10.12659/msm.901765. PMID: 28566676; PMCID: PMC5464767.

11. Shen YM. [Surgical treatment of hypertrophic scar contracture deformity after deep burn]. Zhonghua Shao Shang Za Zhi. 2019 Jun 20;35(6):401-404. Chinese. doi: 10.3760/cma.j.issn.1009-2587.2019.06.001.