



Surgical Treatment Of Scar Microstomia

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Annotation

This article reviews the results of surgical treatment of microstomia caused by scars around the mouth in 122 patients. When eliminating microstomia, the advantages of elimination using a double-humped flap formed by the internal mucous membrane of the oral cavity are mentioned. Using the above improved method of surgical treatment, it was possible to obtain good functional and aesthetic results in 96.9% of patients.

Key words: surgical treatment, outcome, microstomy, removal of the internal mucous membrane of the oral cavity, double hump, flap.

Relevance of the problem: It is known that, according to the World Health Organization (WHO), more than 30-35% of the total number of burns. In the developed countries of the USA, Germany, Great Britain, Russia and other countries, “a comparative analysis of burn rates is 160-190 per 100 thousand population, and mortality is 2.1%.” “In Uzbekistan this figure is 19-23 people per 100 thousand population.” “The result of electrical, contact burns of the face, or any segment led to disability in 18% of cases. Narrowing of the oral fissure (microstomia) is formed as a result of injury to the perioral area, during operations for tumors, burns of the face, as well as with systemic scleroderma and tuberculosis lupus.

Prospects for this area of modern reconstructive plastic surgery: the introduction of new improved methods into clinical practice is aimed at sharply reducing the number of complications in the post-burn rehabilitation system. The main complications after burns in 85-90% of cases require reconstructive operations. When eliminating cicatricial deformities in children, it is considered a complex branch of reconstructive plastic surgery, which involves not only reconstructive practices, but also orthopedic and traumatological care. Today, the use of local plastic and skin flap coverage provides the most optimal aesthetic and functional results.

Materials and research methods: The medical histories of 122 patients with post-burn cicatricial microstomia who were treated in the trauma department of the multidisciplinary medical center of the Andijan region for the period 2014-2023 were retrospectively studied.

The work is based on the results of surgical treatment of 122 patients aged from 15 to 52 years, of which 35 (28.7%) were male and 87 (71.3%) were female. 97 (79.5%) patients were of working age. The patients are divided into two groups. The main group, which consisted of 65 (53.3%) and the comparison group - 57 (46.7%) patients.

All patients were affected with different etiologies of injury. Patients were admitted to the department at various times - from 5 months to 7 years after healing of traumatic wounds.

Z-plasty is possible only if there are small soft scars in the area of the commissures of the mouth. In most cases, the inner layer of the fold is the mucous membrane, and the outer layer is a rough, non-displaceable scar. It is impractical to cut out triangular flaps from these dissimilar fabrics and move



them. We have developed a method for plastic surgery of oral commissures using a double-humped flap cut from the oral mucosa. In 65 (out of 122 patients) patients, 67 operations were performed using the proposed method to eliminate cicatricial microstomia.

Operation technique. At the level of the pupils, two vertical lines are applied with an alcohol solution of brilliant green. A horizontal line is drawn at the base of the wings of the nose, another in the center of the mouth. The intersection of these lines determines the location of the corners of the mouth and the size of the oral fissure (Fig. 1).

The operation began with a longitudinal incision along the ridge of the scar fold constricting the mouth, dividing it into outer and inner layers. The outer leaf was cut perpendicular to the first incision to the entire depth of the scar. These incisions on both sides can be extended by 4-5 mm. Toward the end, the incisions were shaped like a fork or an anchor, thereby eliminating the contracture and widening the oral fissure (Fig. 2).

The formation of the corners of the mouth, the closure of wound surfaces and the restoration of the red border were carried out by moving double-humped flaps cut from the mucous membrane with the submucosal layer of the perioral area (Fig. 3).

In case of combined scar lesions in 6 patients, removal of microstomies was performed simultaneously with excision of scars on the upper and lower lips or in the cheek area. The operation in these cases began with the formation of the corners of the mouth. After forming the flaps, all the scars around the mouth were excised along the intermediate layer, then the double-humped flap was pulled up and the commissure of the mouth was formed from it, suturing it to the wound on the cheek, after which the remaining wound was closed with a free autodermal graft. Compression on the graft was created using tensile sutures.



Fig 1. Unilateral cicatricial microstomy



Fig 2. Borders of the bihump flap

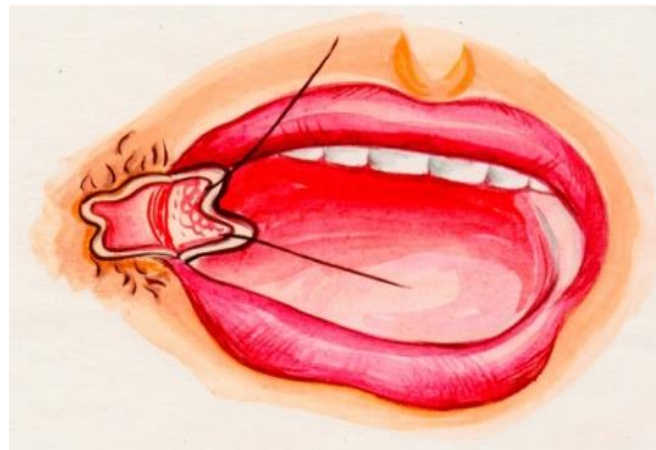


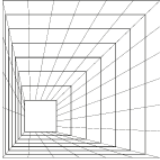
Figure 3. A double-humped skin-fat flap has been formed.



Fig 4. Result of plastic surgery with a double-hump flap

Considering the risk of developing infection in the perioral area in the pre- and postoperative period, regional lymphatic antibiotic therapy was performed for 3-5 days. The sutures were removed on days 5-6.

Our observations have shown that the use of the described technique allows us to achieve good results with maximum use of the mucous membrane of the cheeks and the vestibule of the mouth. It should be noted that double-humped flaps are more advantageous than triangular-shaped flaps due to



a significantly larger volume of tissue borrowing, as well as a lower risk of necrosis of the end of the petal.

Results. In the control group without recurrent elimination of microstomia was observed in 48 (84.2%) patients. Two (3.4%) patients had a complication in the form of marginal necrosis and three (5.3%) had wound suppuration. In 4 (7%) patients, microstomia relapsed in the long-term period due to partial necrosis of the sharp ends of the triangular flaps.

In the main group, complete and relapse-free elimination of microstomia was observed in all 65 (100%) patients; a reserve was created for additional stretching while maintaining the sharp shape of the corners of the mouth. The flap retains viability and in the long term prevents relapse of contracture. No cases of postoperative wound suppuration were observed.

Literature

1. Madazimov M.M., Teshaboev M.G., Madazimov K.M. Surgical rehabilitation of patients with consequences of burns in the head and neck area // Monograph, Tashkent -2019. -159 pp.
2. Teshaboev M.G. Studying the assessment of the quality of life of patients with consequences of burns of the face and neck // Tibbiyotda Yangi kun. – 2020. – No. 2 (30). -WITH. 543-545. (14.00.00, No. 22)
3. Ismailov S.I., Madazimov M.M., Teshaboev M.G. Assessment of the quality of life of patients after plastic surgery of the consequences of burns of the face and neck // Integrative dentistry and maxillofacial surgery - No. 1 (2). 2022. pp. 197-200. (<https://doi.org/10.57231/j.idmfs.2022.1.2.031>).
4. Ismailov S.I., Madazimov M.M., Teshaboev M.G. Comparative analysis of the immediate results of using the proposed complex of preventive tactical and technical aspects of plastic surgery of scar defects of the face and neck // Integrative dentistry and maxillofacial surgery - No. 1 (2). 2022. Page-201-206. (<https://doi.org/10.57231/j.idmfs.2022.1.2.032>).
5. Pulatov N.Kh., Teshaboev M.G. Application of regional lymphatic therapy in reconstructive and plastic surgery after burns // A New Day in Medicine. – 2023. – No. 7 (57). – pp. 543-545. (14.00.00, No. 22)
6. Teshaboev M.G., Khoshimkhozhieva R.A. Intraoperative stretching of the skin when eliminating scar deformities of the nasolabial area // Tibbiyotda yangi kun. – 2023. – No. 7 (57). – P. 25-27 (14.00.00, No. 22)