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# AN IMPROVED METHOD OF SURGICAL TREATMENT OF POST-BURN EVERSION OF THE UPPER EYELID

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**Relevance.** The consequences of traumatic eyelid injury depend on the nature and mechanism of the injury. In severe eyelid injuries, often combined with traumatic brain injury, primary surgical debridement is performed as an emergency procedure and not always in a specialized ophthalmology department. Therefore, eyelid restoration is often performed without regard for its anatomy, resulting in severe deformity.

**Aim:** To improve surgical outcomes for post-burn upper eyelid eversion by introducing improved surgical techniques.

**Materials and methods.** The problem was solved by the fact that in the method of surgical treatment of post-burn eversion of the upper eyelid, including an incision of the skin of the upper eyelid, separation of the skin with dissection of subcutaneous scars until restoration of the natural anatomical position of both eyelids, passing from the side of the skin incision through the cartilage and conjunctiva with nodal fixation in the skin wound, replacement of the resulting defects of the skin of the upper eyelid with skin grafts, which are fixed with nodal or continuous sutures, before the incision of the skin of the eyelid, retreating from the ciliary edge by 2 mm, 2-3 U-shaped stay sutures are applied, then a bordering incision of the skin of the eyelid is made parallel to the ciliary edge, 2 mm above the applied stay sutures, inwards to the edge of the eyelid, which is given the shape of a "fork" from the outside with the displacement of scar tissue from the ciliary edge; pulling the stay sutures downwards, incise and dissect the scars at the outer edge of the wound with a gradual increase in the width and depth of the wound; then the mobilized eyelid is fixed in a stretched state by stitching through the skin using the stay sutures to the cheek, the resulting wound on the eyelid is closed with a pre-prepared skin graft, gauze swabs soaked in an adrenaline solution are applied to the skin graft with an exposure of 3 minutes, then, 6 mm above the ciliary edge of the eyelid, the skin graft is fixed to the skin with separate overlapping sutures, a gauze turunda soaked in Betadine ointment is applied on top; In the early postoperative period, the surgical area is irradiated with a Sogdiana laser device with a wavelength of 700 nm, a power of 2 W per pulse, a frequency of 810 Hz, daily, once a day for 2 minutes, for 10 days.

**Results and discussion.** Patient T-v. 2000. Case history #252/36. Date of injury: 2025. Diagnosis: Postoperative burn-related right upper eyelid eversion.

On admission: general condition satisfactory. No internal pathology was detected.

Local: a dark brown scar is present in the upper eyelid area.

On October 17, 2025, the operation "Repair of right upper eyelid eversion" was performed under endotracheal anesthesia. The surgical site was treated three times with 5% hypertonic sodium chloride solution, then with 5% chlorhexidine bicarbonate solution. A full-thickness skin graft was placed on the upper eyelid using a scalpel, and the donor wound was sutured. Under anesthesia, 2 mm from the ciliary margin, three U-shaped stay sutures were placed and a bordering incision was made in the eyelid skin parallel to the ciliary margin, 2 mm above the placed stay sutures, inward to the eyelid margin, which was externally shaped into a "fork" with the scar tissue shifted from the ciliary margin.

Pulling the stay sutures downward, we incised and dissected the scars at the outer edge of the wound, gradually increasing the width and depth of the wound. The mobilized eyelid was then fixed in a stretched state by suturing through the skin to the cheek using the stay sutures. The resulting wound on the eyelid was closed with a pre-prepared skin graft. Gauze swabs soaked in an adrenaline solution were applied to the skin graft with an exposure of 3 minutes. Then, 6 mm above the ciliary margin of the eyelid, the skin graft was secured to the skin with individual overlapping sutures, and a gauze pad soaked in Betadine ointment was applied over it. In the early postoperative period, the surgical area was irradiated with a Sogdiana laser device at a wavelength of 700 nm, a power of 2 W, and a frequency of 810 Hz, once daily for 2 minutes, for 10 days.

The postoperative period was uneventful. The wound healed primarily. The patient was discharged from the hospital on the second day. The sutures were removed on the seventh day. At her follow-up examination at 6 months, the suture line corresponded to the surrounding tissue, and the scar was delicate and thin.

**Conclusion.** Thus, a surgical treatment method for post-burn upper eyelid eversion has been developed that reduces the incidence of postoperative complications in both the immediate and late periods, and improves the cosmetic and functional outcomes of the surgery.