

## Features of microsurgical treatment in patients with recurrent pterygium.

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**Introduction.** Recurrent pterygium is clinically manifested by a triangular fold of the bulbar conjunctiva with the base towards the semilunar fold and the tip towards the cornea. The etiology and pathogenesis of recurrent pterygium is unknown. It would result from a corneo-conjunctival epithelial alteration, associated with a proliferation of fibrinogen tissue, progressing between the epithelium reduced to a few layers of cells and the perforated Bowman's membrane.

**Aim.** To assess the effectiveness of a modified method in the treatment of recurrent pterygium.

Objectives:

1. To determine the effectiveness of the modified method using the free conjunctival flap in the treatment of recurrent pterygium.
2. To appreciate the benefits of the modified method depending on the addressability of patients with recurrent pterygium.

**Materials and methods.** The study included 10 patients (5 men and 5 women) with recurrent pterygium aged 20-71 years who underwent pterygium removal according to a modified method. Thus, during the surgical intervention, a movable, free, rectangular flap with sides 5 x 3 mm was prepared inferiorly paralimbally, which was fixed conjunctivally paralimbally, nasally in the area of the body of the pterygium translocated to the superior or inferior fornix. It is important to position the formed conjunctival flap with a limbal orientation.

**Discussions.** The postoperative recovery was fast, but for several days after the operation the globe was hyperemic, irritating the suture fibers used to fix the conjunctival autograft. Antibiotic and anti-inflammatory in the form of eye drops are needed. Thus, in all patients, 3 months after the microsurgical intervention, no signs of recurrence of the operated pterygium were detected. In 2 late-presenting patients, the pterygium was extended onto the cornea, resulting in deep scarring. As a consequence, the radius of corneal curvature was changed with the decrease in visual acuity in the postoperative period. This is why surgery for recurrent pterygium should not have been delayed.

**Conclusions:**

1. The microsurgical method proposed for the treatment of recurrent pterygium is safe and effective, determining the lack of recurrence in the postoperative period.
2. Microsurgical intervention based on recurrent pterygium should be performed as early as possible.

**Keywords:** recurrent pterygium, free conjunctival flap, recurrence, postoperative period.