

## FEATURES OF MICROSURGICAL TREATMENT IN PATIENTS WITH *PTERYGIUM*

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**Background.** *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 *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 *pterygium*, stage II.

**Objectives.** 1. To determine the effectiveness of the modified method using the free conjunctival flap plus subconjunctival administration of 5-FU (fluoruracil) in the treatment of patients with *pterygium*.

2. To appreciate the benefits of the modified method depending on the addressability of patients with *pterygium*.

**Materials and methods.** The study included 8 patients (4 men and 4 women) with *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 plus subconjunctival administration of 5-FU. 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 *pterygium* should not have been delayed.

### Conclusions:

1. The microsurgical method proposed for the treatment of *pterygium* is safe and effective, determining the lack of recurrence in the postoperative period.

2. Microsurgical intervention based on *pterygium* should be performed as early as possible.

**Keywords:** recurrent *pterygium*, free conjunctival flap, recurrence, postoperative period, 5-FU (fluoruracil).