

## Optimized method of surgical treatment of persistently recurrent pterygium

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**Relevance.** The problem of recurrence of the pterygium remains a topical issue of ophthalmic surgery and, according to the data of different authors, ranges from 30 to 70%.

**The purpose** of this study was to optimize the method of surgical treatment of persistently recurring pterygium.

**Material and methods.** The study group consisted of 15 (15 eyes) patients with persistently recurring pterygium. In all cases, pterygium was operated more than 2 times or more, after which in the area of removed pterygium the formation of persistent opacity, incorrect astigmatism, gross of scarring of the bulbar conjunctiva at great length were noted. All patients underwent standard preoperative examination, and optical coherence tomography was additionally performed to assess the thickness of the cornea in the projection of the pterygium. According to the keratometry, the cylindrical component was from 1.0 to 6.0 dptr. Preoperative visual acuity in the analyzed cases was 0.3-0.7 with correction.

The proposed method consists in cutting off and excising the body and head of the pterygium with the surrounding altered tissues within the healthy conjunctiva and along the semilunar fold, cleansing the surface of the cornea. After excision of the pterygium, produce a recession of the internal rectus muscle 3-4 mm posteriorly. From the surface layers of the upper segment of the bulbar conjunctiva, a thin autograft of the semilunar form is cut out on the feeding leg, commensurate with the formed tissue defect on the sclera. The autograft is moved and laid on the formed defect in the inner segment and sew to the healthy part of the conjunctiva by 5-6 knotty sutures. All patients underwent surgical treatment according to this method. After the operation, all patients underwent standard postoperative anti-inflammatory and keratoprotective therapy.

**Results and its discussion.** During the surgical treatment and in the postoperative period, no complications were detected. According to keratometry, the cylindrical component decreased to 0.8 diopters. Visual acuity in 10 cases increased to 0.7-0.9 without correction, which is associated with excision of scar-altered tissues and a decrease in the values of corneal astigmatism. The period of observation of patients was 12 months. Relapse of the disease, according to remote observations of patients, was observed on 1 eye and amounted 6.6%.

**Conclusions.** The proposed modified method of treatment based on the recession of the internal rectus muscle with conjunctival autoplasty on the stalk can be used as a method of choice for a persistently relapsing pterygium.

**Key words:** pterygium, persistently recurrent pterygium, surgical treatment.

**Professional Biography**

Nozimov A. E. graduated Tashkent Medical Academy in 2014. In 2017 graduated ophthalmology master-degree. From 2017 is working as ophthalmologist in Eye Clinic "Sikhat-Kuz". Recently, is working on dissertation for PHD degree, the name of work "Development and estimation of effectiveness of combine treatment in recurrent pterigium". He was the author of more than 10 publications. Specialization: glaucoma, neuroophthalmology, pterigium and pathology of eye in general diseases.

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