complicație a miopiei maligne (circa 10%) care oferă pacientului un prognostic rezervat cu privire la funcția vizuală normală. Printre alte complicații pot fi menționate: cataracta subcapsulară, posterioară (9%), glaucom primar cu unghi deschis (4,7%), decolare de retină (2%), apariția petei Fuchs (0,5%). Câmpul vizual este redus concentric și se poate observa apariția scotoamelor cu lărgirea petei oarbe. Stafiloamele nazale pot produce hemianopsii temporale. Investigațiile OCT și AGF sunt utile în depistarea complicațiilor miopiei degenerative, și anume a membranelor de neovascularizație coroidiană, care se prezintă sub forma unor leziuni hiperreflective detectate în straturile epiteliului pigmentar până la membrana limitantă externă.

Concluzii. Miopia degenerativă este o patologie complexă, cu evoluție progresivă și prognostic rezervat. Rata de apariție a complicațiilor în evoluția acestei patologii este destul de mare, ceea ce conduce în final la pierderea semnificativă a acuității vizuale.

Cuvinte-cheie: miopie, miopie degenerativă, complicații miopie

SESIUNEA IV / *SESSION IV*

DIAGNOSTICUL ȘI TRATAMENTUL PATOLOGIILOR CORNEENE

DIAGNOSIS AND TREATMENT OF CORNEAL DISEASES

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MODIFIED TECHNIQUE OF PENETRATING KERATOPLASTY IN COMPLICATED CASES

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Rezumat

Tehnica modificata a keratoplastiei penetrante în cazuri complicate

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Scopul acestei lucrări este studierea eficacității keratoplastiei penetrante modificate în prevenirea complicațiilor chirurgiei pe glob deschis. Acest tip de chirurgie este periculos pentru păstrarea postoperatorie a funcțiilor vizuale. Puchkovskaya N.A. a propus o nouă metodă chirurgicală, fiind operați 165 de pacienți cu leucom cornean, afachie complicată, simblefaron etc.

Cuvinte-cheie*: keratoplastie, keratoplastie penetrantă, chirurgie în aer liber*

Summary. To learn the efficacy of modified penetrating keratoplasty (PK). In prevention of open sky surgery in complicated patients. The open sky surgery is very dangerous for the future functions of the eye. This modification of PK allows us to avoid open sky moment during operation and to save the eye from the development of dangerous complications of open sky eye surgery. According to our experience, this technique may be used as operation of choice in the microsurgical treatment of complicated cases of corneal diseases.

Purpose. To learn the efficacy of modified penetrating keratoplasty (PK)

In prevention of open sky surgery in complicated patients.

Materials and methods. Our modification of PR by Puchkovskaya N.A. included these main steps: sequential and step-by-step cutting out and fixation of host and donor flap, slippery removing of host flap using visco-protection of donor endothelium cells, final fixation of donor flap, removing visco-material from anterior chamber. Using the modified PK were operated 165 patients (age 12-79 years old) with single eye, complicated cornea opacification, complicated aphakia, symblepharone and others.

Results. In no case we had obtain any serious complication, such as vitreous loss or expulsive hemorrhage. The transparent corneal graft survival took place in 90.3% (149 eyes). In 12 cases (7.3%) with total vascular corneal opacification we observed postoperatively mild corneal graft reaction with light opacification and single corneal neovascularization. In 4 patients we added additional suture in 2 weeks after surgery. The improvement of visual acuity was obtained in every patient (from h.

m. to 0.1 – 0.5; from 0,06 to 0.1 – 0.7). Postoperative care included standard local and general therapy using corticosteroids during 6 months.

Conclusions. The open sky surgery is very dangerous for the future functions of the eye. This modification of PK allows us to avoid open sky moment during operation and to save the eye from the development of dangerous complications of open sky eye surgery. According to our experience, this technique may be used as operation of choice in the microsurgical treatment of complicated cases of corneal diseases.

Keywords: keratoplasty, penetrating keratoplasty, open sky surgery

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THE CLINICAL NEED FOR CORNEAL GRAFTS IN THE REPUBLIC OF MOLDOVA

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Rezumat

Necesitatea clinică de grefe de cornee în Republica Moldova

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Patologia corneei reprezintă a treia cauză de orbire la nivel mondial, după cataractă și glaucom, cu afectarea a circa 10 milioane de persoane care suferă de cecitate bilaterală. Se estimează că 12 milioane de oameni sunt în așteptarea transplantului de cornee. Doar 50 de țări acoperă necesitatea proprie de servicii de transplantologie. Majoritatea pacienților din listele de așteptare sunt din țări unde lipsește banca de transplant sau nu au acces la țesuturi donate.

***Cuvinte-cheie**: grefa de cornee, transplant, patologia corneei*

Introduction. Corneal pathology is considered the third leading cause of blindness worldwide, after cataracts and glaucoma, with 10 million people with bilateral corneal blindness [1]. An estimated 12 million people are waiting for a corneal transplant. 50 countries are considered self-sufficient, almost self-sufficient or adequate for corneal transplantation [1]. Most patients on waiting lists live in countries without an eye bank or do not have routine access to donated tissues.

Global data from a 2012 study, in which the Republic of Moldova also participated, show that 184.576 corneal transplants were performed in 116 countries out of the 148 countries participating in the study [2]. According to this study, the United States had the highest transplant rate - 19.91 per 100,000 population, followed by Lebanon - 12.21 per 100,000 population and Canada - 11.7 per 100,000 population, while the median of the 116 countries analyzed was 1.91 per 100,000 population. The global study quantified the considerable deficiency of corneal graft, with only 1 cornea being available for 70 needed. As with organs, the global demand for corneal graft to be transplanted goes beyond the available supply.

Materials and methods. The research was conducted based on the information about the transplantation field of the health system, with reference to national and international data and sources. Underlying the research was the analysis of key elements in the activity of donation and transplantation of human tissues during the years 2013 - 2019.

Results. In the Republic of Moldova, in the structure of ophthalmic morbidity, corneal pathology occupies a third place and constitutes 23% of the total number of ocular pathologies. Inflammatory processes that produce corneal ulcers, considered an ophthalmic emergency, account for 20% of cases [3].

The waiting list for corneal transplants is growing steadily, an average of 27.25 ± 9.9 patients per year, or 7.8 patients per million population. The rate of patients who received corneal transplants compared to patients enrolled in the waiting list varied depending on the actual number of donors, and was the highest in 2013 and accounted for 77%, then decreased to 11.8% in 2015, and subsequently increased to 33.8% in 2019.

During the research period, the total annual number of corneal transplants in average was of 9.5 with 9.5 grafts per million population. The rate of transplanted patients compared to patients on the waiting list averaged 36.1 ± 11.7% (10.3 patients per million population), that is, only 1 cornea available for almost 3 patients in need of a transplant. The Human Tissue Bank collected and processed an average of 46.8 ± 4.6 corneas per year from 23.2 ± 2.4 deceased donors, of which an average of 11.2 ± 3.3 (23.9%) they were destroyed for various reasons. Thus, in order to achieve 100% coverage of corneal transplant services in relation to needs, it