

UDC: 617.713-089.843-06-084

MODIFIED TECHNIQUE OF PENETRATING KERATOPLASTY IN COMPLICATED CASES*Academician, prof. Veselovskaya Zoya, prof. Veselovskaya Natalia, Pyatiizbyantceva Olga, PhD Zaporozchenko Inna, Kyiv Eye Center, KGH № 1, Kyev Medical University***Rezumat*****Tehnica modificata a keratoplastiei penetrante în cazuri complicate****Academician, prof. Veselovskaya Zoya, prof. Veselovskaya Natalia, Pyatiizbyantceva Olga, dr. Zaporozchenko Inna Kyiv Eye Center, KGH № 1, Kyev Medical University**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