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Results of Rehabilitation of Patients with Penetrating Wounds of the Eyeball

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Annotation: The effectiveness of treating patients with penetrating wounds of the eyeball depends on the quality of specialized medical care. This includes both the full scope of primary surgical treatment of the wound and adequate conservative, surgical treatment of post-traumatic inflammatory complications, as well as professionally correct observation of patients with the consequences of penetrating wounds of the eye [1-4]. Outpatient observation of these patients is carried out mainly in outpatient clinics at the place of residence. Nevertheless, ophthalmologists of the outpatient clinic do not always have the opportunity (in terms of instrumental and laboratory equipment, the presence of appropriate specialization) to competently assess the severity of the injury and the prognosis of the course of the post-traumatic period, and are not always competent in resolving issues of surgical rehabilitation of these patients.

One of the topical issues in ophthalmology is the problem of damage to the organ of vision. Studying the outcomes of treatment of penetrating eye wounds is of interest from the point of view of medical and, subsequently, social rehabilitation of this category of patients.

Objective:

To study the outcomes of rehabilitation of patients with penetrating wounds of the eyeball in the conditions of an ophthalmological hospital and outpatient clinic in the Samarkand region of the Republic of Uzbekistan.

Materials and research methods:

This paper analyzes the results of complex treatment of 82 patients with penetrating wounds of the eyeball. The majority of this category of patients are men. In the analyzed group there were 80 men and 2 women. All patients were of working age: 24 (29.0%) were under 20, 26 (31.6%) were 21-30 years old, 17 (20.6%) were 31-40 years old, 10 (12.0%) were 41-50 years old, and 5 (7.0%) were over 50 years old. In 53 (74.0%) patients, the injury was accompanied by the introduction of a foreign body into the eye. It should also be noted that all these patients were male. In 42 (79.1%) cases, the injury was with availability magnetic foreign body, and in 11 (20.9%) amagnetic . The injury was industrial in 48 patients out of 82 (58.5%), domestic - in 33 (41.5%).

The following ophthalmological methods were used for the study: complaints, anamnesis collection, clinical signs, the lateral refreshing method, biomicroscopy on the ЩЛ 52 device (Ukraine), standard visometry according to the Golovin-Sivtsev and Orlov table, determination of intraocular pressure by palpation, examination in transmitted light, ultrasound of the eye on the " Sanomed " device (USA), orbital radiography using the Komberg method Beltina , CT scan of the eyeball and MRI of the eyeball to rule out damage to the orbital bones

To clarify the localization of the eyeball injury, the prevalence of the process, the depth of the lesion, the presence and localization of a foreign body and to determine its nature, modern diagnostic methods were used:

clinical, radiological , ultrasound, electrophysiological. Studies have revealed extreme variability in the severity of traumatic eye injury, which makes it extremely difficult to group patients into homogeneous groups.

Results of the study: In this regard, the scope of treatment measures carried out on this patient also turned out to be varied. 34th In 78 cases out of 82 (95.1%) injuries, primary surgical treatment of the wound was performed, of which in the first 24 hours after injury in 44 (56.4) patients, over 24 hours (43.6%). Microsurgical needles were used for wound treatment. The operations were performed under a microscope. Primary reconstructive surgery (24.3%) patients. Reconstructive surgery was performed in 20 and curative surgery for the consequences of injury was performed in 27 (32.8%) patients. The foreign body was removed in 49 (92.1%) cases out of 53.

During the operation and in the postoperative period, broad-spectrum antibiotics, corticosteroids, desensitizing agents, and enzyme inhibitors were actively used. therapy tissue vitamin therapy and physiotherapeutic procedures. In particularly severe cases, if necessary, patients were sent for treatment to specialized institutes in the central cities of our republic (Tashkent).

Conclusions: The following immediate outcomes were achieved as a result of the treatment. It was possible to save 76 eyes (92.7%), of which 19.7% had visual acuity from 0.5 to 1.0, 14.4% had visual acuity from 0.2 to 0.4, 28.9% had visual acuity from 0 to 0.1, and 37% of eyes had vision from zero to correct light perception .

The highest number of adverse outcomes was observed in the group of patients with intraocular foreign bodies, especially amagnetic ones.

Analysis of our materials allows us to note that penetrating wounds lead to varying degrees of severity of damage to the eyeball, ending, despite the use of modern diagnostic and treatment methods, with unfavorable outcomes leading to disability. The development of more effective effective patients with penetrating eye wounds and their consequences is relevant.

Literature:

1. Кадирова А, Юсупов А, Бобоев С. Интраокулярная коррекция миопии высокой степени. Каталог монографий. 2023;(1):1-104.
2. Юсупов АА, Хамракулов СБ, Бобоев СА. КОРРЕКЦИЯ ВРОЖДЕННОЙ АНИЗОМЕТРОПИЧЕСКОЙ МИОПИИ ВЫСОКОЙ СТЕПЕНИ С

ИСПОЛЬЗОВАНИЕМ ФАКИЧНЫХ ИНТРАОКУЛЯРНЫХ ЛИНЗ. Advanced Ophthalmology. 2023;1(1):187-190. doi:10.57231/j.ao.2023.1.1.044

3. Абдурахманович БС, Абдуазизович ЮА. МИКРОИМПУЛЬСНАЯ ЛАЗЕРНАЯ ЦИКЛОФОТОКОАГУЛЯЦИЯ В ЛЕЧЕНИИ РЕФРАКТЕРНОЙ ГЛАУКОМЫ. Advanced Ophthalmology. Published online April 19, 2023. Accessed February 2, 2025. https://journals.scinnovations.uz/index.php/ao/article/view/536
4. А.т А, Ж.а Р, А.а Ю, И.н Я. ОЦЕНКА ЭПИДЕМИОЛОГИЧЕСКОЙ СИТУАЦИИ С ДИАБЕТИЧЕСКОЙ РЕТИНОПАТИЕЙ В ГОРОДЕ САМАРКАНД. Экономика и социум. 2024;(4-1 (119)):758-761.
5. Бабаев СА, Кадирова АМ, Хамракулов СБ. ПРИМЕНЕНИЕ ЗАДНЕКАМЕРНЫХ ФАКИЧНЫХ ИОЛ ПРИ КОРРЕКЦИИ МИОПИИ ВЫСОКОЙ СТЕПЕНИ. GOLDEN BRAIN. 2024;2(1):329-335.
6. Абдурахманович БС, Муратовна КА. РЕЗУЛЬТАТЫ ЛЕНСЭКТОМИИ В ЛЕЧЕНИИ БОЛЬНЫХ С ПЕРВИЧНОЙ ЗАКРЫТОУГОЛЬНОЙ ГЛАУКОМОЙ. Advanced Ophthalmology. Published online April 19, 2023. Accessed February 2, 2025. https://journals.scinnovations.uz/index.php/ao/article/view/535
7. З ЖД, А БС. РЕЗУЛЬТАТЫ ОЦЕНКИ УРОВНЯ ЭНДОТЕЛИНА-1 И Д-ДИМЕРОВ В СЛЕЗНОЙ ЖИДКОСТИ У ПАЦИЕНТОВ С АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИЕЙ. SCIENTIFIC JOURNAL OF APPLIED AND MEDICAL SCIENCES. 2024;3(3):300-307.
8. З ЖД, А БС. РЕЗУЛЬТАТЫ ОЦЕНКИ ЭФФЕКТИВНОСТИ КОМПЛЕКСНОГО ЛЕЧЕНИЯ У ПАЦИЕНТОВ С 3-4 СТАДИЯМИ ГИПЕРТОНИЧЕСКОЙ АНГИОРЕТИНОПАТИИ. SCIENTIFIC JOURNAL OF APPLIED AND MEDICAL SCIENCES. 2024;3(3):308-315.
9. Юсупов А, Василенко А, Юсупова Н. Результаты хирургической коррекции высокой анизометропии у больных с косоглазием. Журнал проблемы биологии и медицины. 2018;(4 (104)):135-136.
10. Жалалова Д, Норматова Н, Бобоев С. Фенофибраты в лечении диабетической офтальмопатии. Каталог монографий. 2023;(1):2-120.
11. Косимов РЭ, Бобоев СА, Кадирова АМ. ХИРУРГИЧЕСКОЕ ЛЕЧЕНИЕ ВТОРИЧНОГО РАСХОДЯЩЕГОСЯ КОСОГЛАЗИЯ У ДЕТЕЙ. Advanced Ophthalmology. 2023;1(1):128-131. doi:10.57231/j.ao.2023.1.1.030
12. Abdurakhmanovich BS, Botirovich KS, Sadullaevich RS. CORRECTION OF ANISOMETROPIA BY PHAKIC INTRAOCULAR LENSES IN PATIENTS WITH CONGENITAL MYOPIA. World Bulletin of Public Health. 2024;33:98-100.
13. S.A.Boboev, Boboev SS, Khamrakulov SB, Abdullaeva DA. EFFICACY AND SAFETY OF DIODE-LASER TRANSSCLERAL CYCLOPHOTOCOAGULATION IN THE TREATMENT OF REFRACTORY GLAUCOMA. World Bulletin of Public Health. 2022;10:35-37.
14. S.a B, S.s B, S K, D.r A. Micropulse Transscleral Cyclophotocoagulation in Combination with Anti-Vegf Therapy in Patients with Neovascular Glaucoma. International Journal of Alternative and Contemporary Therapy. 2024;2(5):149-155.
15. Tolibovich AA, Alimjanovich RJ, Abduazizovich YA, Shavkatjonovna XM. OFTALMOLOGIK YORDAM XOLATI VA UNI DIABETIK RETINOPATIYA BILAN KASALLANGAN BEMORLARDA TAKOMILLASHTIRISH (ADABIYOT SHARHI). JOURNAL OF BIOMEDICINE AND PRACTICE. 2023;8(4). Accessed February 2, 2025. https://tadqiqot.uz/index.php/biomedicine/article/view/8258

16. Kadirova A, Boboev S, Khamidova F, Sobirova D, Khamrakulov S. PERIPHERAL PREVENTIVE LASER COAGULATION OF THE RETINA IN PATIENTS WITH HIGH DEGREE MYOPIA. Journal of Survey in Fisheries Sciences. 2023;10(2S):3932-3940. doi:10.17762/sfs.v10i2S.1716
17. Erkinovich KR. SURGICAL TREATMENT OF JOINT HORIZONTAL STRABISMUS. World Bulletin of Public Health. 2022;10:173-178.