

QUALITY OF LIFE AND REHABILITATION FEATURES OF PATIENTS WITH ANOPHTHALMIA

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(Literature Review)

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Human perception and understanding of the surrounding environment occur through various sensory analyzers, among which the visual analyzer plays a primary role. Among all human senses, the organ of vision has long been regarded as the most remarkable and significant product of nature's creative force. The visual system allows humans to receive up to 90% of the information about the surrounding world (Kopaeva V.G. et al., 2002). Each year, 55 million people worldwide suffer from eye injuries, and as a result, 1.6 million become blind (Foster A. Vision 2020).

Enucleation (or evisceration) of the eyeball is a severe psychological and physical trauma for a person. The loss of vision significantly impacts all aspects of social functioning—personal, professional, family, and daily life—making readaptation to everyday life more challenging. The removal of an eyeball at a conscious age following a severe eye disease or injury creates new conditions for perceiving the external world. During adaptation to monocular vision, individuals experience a range of social, physical, economic, and domestic challenges, including difficulties in professional activities, driving, loss of specialization, employment issues, and the need to retrain for a new profession. Additionally, eye removal is a psychological trauma, and the doctor's role is to help mitigate this trauma and assist the patient in adapting to new conditions.

Eye removal is performed under strict indications, including severe traumatic eye injuries to prevent sympathetic inflammation, intraocular malignant tumors, absolute painful glaucoma, and cosmetically unsatisfactory blind eyes with persistent uveitis when prosthetics is impossible. [5] Barash, A.N. (2016). According to various medical institutions (2001–2004), the causes of enucleation were trauma (23.3%–54.6%), absolute painful glaucoma (12.3%–46.7%), oncopathology (5.1%–10.4%), and panophthalmitis (2.4%). (Sadovskaya E.P., 2005).

Ocular prosthetics is a mandatory rehabilitation method for patients with anophthalmia and subatrophy of the eyeball, helping to reduce psychological trauma and accelerate the rehabilitation process. The cosmetic success of ocular prosthetics largely depends on the formation of a high-quality supportive stump, which can only be achieved by introducing an implant into the orbital cavity after enucleation or evisceration. Timely and appropriate orbital reconstruction, combined with staged ocular prosthetics, enhances social activity and quality of life (QoL) for patients. (I.A. Filatova, 2007; M.I. Razumovsky and others, 2014)(2-3). Psychological support is also crucial for post-prosthetic patients, as improving the QoL of individuals with anophthalmia and low vision is a social issue that extends beyond ophthalmology to other medical fields, education, and broader society (5-6) (Barash A.N., 2016; Kalinina T.V., 2008).

Inadequate creation of the supportive stump, imperfections in ocular prosthetics, and lack of psychological counseling contribute to the development of an "inferiority complex" in affected

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individuals. Their quality of life is significantly diminished, necessitating a comprehensive evaluation of medical and social consequences after ocular prosthetics. Such assessments, along with clinical and social factor analyses, can help improve medical and social rehabilitation approaches for these patients. Ocular prosthetics remains a significant medical and social challenge in rehabilitating individuals with anophthalmia, microphthalmia, and subatrophy of the eye resulting from severe trauma, oncological conditions, inflammation, congenital disorders, and absolute glaucoma.(7) (Verigo E.N., Gundorova R.A., Lavrentyeva N.V., Tuchin A.V., Kharlampidi M.P., 2010).

Research by Verigo E.N. and Sadovskaya E.P. (2005) confirms that ocular prosthetics is the only rehabilitation method for these patients. It includes clinical, scientific, legal, and methodological considerations, covering aspects such as clear indications for eye removal, appropriate surgical techniques using implants, initial prosthetic fitting, staged prosthetics, selection of high-quality prostheses (glass or plastic), customized prosthesis fabrication, prosthetic replacement timing, reconstructive and plastic surgeries, and psychological support (9) (Valsky V.V., Kiryukhina S.L., 1991; Kataev M.G., 1998; Kharlampidi M.P., 2002; Filatova I.A., 2005, 2008;(10) Verigo E.N., Pryakhina I.A., Lavrentyeva N.V., 2012). These measures are carried out across various medical institutions, including ophthalmic surgical centers, ocular prosthetics laboratories, and prosthetic selection centers. Currently, the coordination between these institutions is lacking and must be restored to maintain regulatory compliance, ensure cost transparency, improve prosthesis quality, and enhance the training of medical and technical personnel.

In cases of post-traumatic and congenital pathologies, which often involve deformations, scarring of the conjunctival cavity, eyelids, and orbital bones, advanced diagnostic techniques such as computed tomography and ultrasound imaging play a crucial role.(11-12-13) (Kiryukhina S.L., 1991; Valsky V.V., 1998; Atta H.R., 1999; Byrne S.F., Green R.L., 2002; Verigo E.N., Kiseleva T.N., Shtilman M.I., 2012).

The analysis of these diagnostic data helps guide surgical interventions in forming volumetric motor stumps and performing reconstructive orbital surgeries to correct anophthalmic syndrome. However, literature on long-term outcomes of ocular prosthetics remains scarce (Verigo E.N., Sadovskaya E.P., 2003, 2004, 2005, 2011). Plastic surgery plays a key role in ophthalmic rehabilitation, aiming to improve the patient's quality of life and overall well-being. Studies show that over 80% of patients with anophthalmia are dissatisfied with their appearance.

Thus, according to above mentioned sources, the pressing issue today is the development of new rehabilitation approaches for anophthalmia patients, including advancements in surgical techniques, effective correction of cosmetic defects, and improving quality-of-life measures.

List of References

1. Kopaeva V.G. et al. *Eye Diseases // Moscow, Medicine, 2002. — P. 558*
2. I.A. Filatova. *Anophthalmia: Pathology and Treatment. Moscow, 2007. — 213 p.*
3. M.I. Razumovsky [et al.]. *Medical and Social Problems of Ophthalmic Prosthetics. — 2014. — No. 2. — P. 50-53.*
4. Sadovskaya E.P. *Features of Ocular Prosthetics Depending on the Clinical and Anatomical Characteristics of Anophthalmia. — 2005.*

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VOLUME-5, ISSUE-2

5. Barash, A.N. The European Approach to the Problem of Anophthalmia on the Example of Moorfields Eye Hospital. Modern Approaches to Health Promotion: Materials of the VI International Scientific and Practical Conference, Gomel, October 13, 2016 / Gomel State Medical University; Eye Diseases // Moscow, Medicine, 2002. — P. 558 [1]. 2016. — Issue 6. — P. 7-10
6. Kalinina, T.V. Quality of Life of the Population as an Important Component of Public Health / T.V. Kalinina // Medicine. — 2008. — No. 4. — P. 7-9.
7. Verigo E.N., Gundorova R.A., Lavrentyeva N.V., Tuchin A.V., Kharlampidi M.P. Priority Directions for Improving the Effectiveness of Ocular Prosthetic Care in the Russian Federation // Russian Ophthalmological Journal. — 2010. — Vol. 3, No. 3. — P. 8-14.
8. Verigo E.N., Sadovskaya E.P., Lavrentyeva N.V. Traumatic Pathology as One of the Main Causes of Eyeball Removal // Scientific and Practical Conference "Russian Ophthalmological Forum": Collection of Scientific Papers. — Moscow, 2010. — Vol. 1. — P. 38-42.
9. Valsky V.V., Kiryukhina S.L. Correlation of Orbit and Stump Parameters After Enucleation // Bulletin of Ophthalmology. — 1990. — No. 6. — P. 26-29.
10. Verigo E.N., Pryakhina I.A., Lavrentyeva N.V. Structure of Ocular Prosthetic Care in Russia. Scientific and Practical Conference "New Technologies for Diagnosis and Treatment of Eye Diseases": Collection of Scientific Papers. — Khabarovsk, 2012. — Vol. 1. — P. 17-20.
11. Kiryukhina S.L. Computed Tomography in the Comprehensive Diagnosis of Post-Traumatic and Congenital Defects of the Orbital Region. Abstract of Dissertation. 1991. 23 p.
12. Valsky V.V. Computed Tomographic Semiotics of Primary Benign and Malignant Orbital Tumors in Children. Collection of Scientific Papers of the Scientific and Practical Conference "High Technologies in Ophthalmology". Krasnodar, 2008. — P. 129-133.
13. Shtilman M.I., Ramazanova K.A., Artyukhov A.A., Kruzhkova G.V., Sadovskaya E.P., Lavrentyeva N.V. Possibilities of Comprehensive Ultrasound Examination of the Orbit in Assessing the Prognosis of Prosthetics Results in Subatrophy and Microphthalmia // Ophthalmology, 2012. — Vol. 9, No. 4. — P. 52-54.
14. Verigo E.N., Sadovskaya E.P., Kataev M.G., Lavrentyeva N.V. The Role of Primary and Staged Prosthetics in the Rehabilitation of Individuals with Anophthalmia. Bulletin of Ophthalmology. — 2010. — Vol. 12, No. 5. — P. 21-25.