"ANALYSIS OF ISOLATED EYE INJURIES IN LIVING INDIVIDUALS: FORENSIC MEDICAL PRACTICE IN UZBEKISTAN"

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Annotation: Isolated injuries of the visual organ are one of the complex forms of damage that require accurate forensic medical assessment. In Uzbekistan, this area is of particular importance in the context of the development of national legislation and reform of the health care system. The article examines the legal and methodological aspects of forensic medical examination of eye injuries, analyzes regional forensic medical practice, and suggests ways to improve the quality of expert opinions.

Keywords:organ of vision, eye injury, forensic medical examination, severity of harm to health.

Introduction. Isolated injuries to the eye and its accessory apparatus are common in domestic, industrial and criminal injuries. The specifics of diagnostics, legal qualification and expert assessment of such injuries necessitate a comprehensive interdisciplinary approach. In Uzbekistan, forensic medical practice needs to adapt international standards to the national healthcare and law enforcement system.

Purpose of the study. The purpose of this article is to analyze the features of forensic medical examination of isolated injuries of the visual organ in living individuals in the conditions of the Republic of Uzbekistan, taking into account current regulatory documents, regional expert practice and international standards, as well as identifying key problems and proposals for improving the quality of expert opinions.

Materials and research methods. 94 cases of forensic medical examination of isolated injuries to the visual organ, conducted in forensic medical bureaus of Tashkent, Samarkand and Andijan regions for the period from 2021 to 2024, were analyzed. Clinical reports of ophthalmologists, expert reports and regulatory documents of the Ministry of

Health of the Republic of Uzbekistan were used.

Table 1

Distribution of types of isolated injuries to the visual organ and their classification according to the severity of harm to health (n = 94)

Type of injury	Number of cases (n)	% of total	Qualification of damage to health
Eyeball contusion	34	36.2%	Mostly minor harm
Damage to the eyelids and conjunctiva	19	20.2%	Minor harm
Penetrating corneal injury	20	21.3%	Moderate severity, in some cases severe
Hyphema (hemorrhage into the anterior chamber)	14	14.9%	Moderate severity
Retinal detachment, tears	7	7.4%	Predominantly serious harm
Total	**94**	**100%**	—

Table 2

Comparison of clinical and forensic assessment severity of visual impairment (n = 94)

Severity (clinical)	Cases (n)	The forensic medical	SME underestimated*	SME overestimated**

		examination confirmed		
Light	52	46 (88.5%)	-	6 (11.5%)
Moderate severity	30	24 (80.0%)	4 (13.3%)	2 (6.7%)
Heavy	12	9 (75.0%)	3 (25.0%)	-
Total	**94**	**79 (84.0%)**	**7 (7.4%)**	**8 (8.6%)**

Note:

* By "Forensic medical examination underestimated" we mean cases where the expert assessment determined a lesser degree of severity than in the clinical diagnosis (for example, persistent visual impairment was underestimated).** By "Forensic medical examination overestimated" we mean cases where the expert assessment turned out to be stricter than the clinical conclusion (for example, due to incorrect interpretation of temporary loss of function as persistent).

Research results and discussion. The most common injuries were: eyeball contusions (36%), penetrating corneal wounds (21%), hemorrhages into the anterior chamber (hyphema) (15%), retinal detachment and ruptures (8%), and eyelid injuries (20%). In 64% of cases, the harm to health was classified as minor, in 28% - moderate, and in 8% - severe. Problems arose due to insufficient recording of residual effects, lack of dynamic observation, and discrepancies between the clinical assessment and the forensic medical opinion.

In the conditions of Uzbekistan, forensic medical examination of the visual organ requires: unification of criteria for assessing the reduction of visual acuity; interaction of experts with specialized ophthalmologists; consideration of the specifics of the employment of victims (for example, in persons whose profession is related to precise vision); implementation of international classifications (for example, ICD-11) and

adaptation of foreign methods. In addition, it is necessary to train specialists in forensic ophthalmology and regularly update regulatory documents governing the assessment of bodily injuries.

Conclusions. Forensic medical examination of isolated eye injuries in Uzbekistan requires a systematic approach, including improvement of the regulatory framework, development of human resources and introduction of modern diagnostic standards. This will increase the objectivity of health damage assessment and avoid expert errors.

References.

1. Баранов П.А., Котова И.Н. Экспертиза телесных повреждений органа зрения: современные подходы //Судебно-медицинская экспертиза, 2022; 65(2): 27-33. Baranov P.A., Kotova I.N.Examination of bodily injuries to the organ of vision: modern approaches // Forensic medical examination, 2022; 65(2): 27-33.

2. Қўшчиева Н.А., Жўраев У.Б. Судебно-медицинская экспертиза повреждений органа зрения //Медицинский журнал Узбекистана, 2022, №2, С. 47-52. Kushchieva N.A., Zhuraev U.B.Forensic medical examination of damage to the visual organ // Medical Journal of Uzbekistan, 2022, No. 2, pp. 47-52.

3. Нормативно-методическое руководство по определению степени тяжести телесных повреждений, Ташкент, 2019. Normative and methodological guidelines for determining the severity of bodily injuries, Tashkent, 2019.

4. David DB, Sandinha MT, Hodgkins PROcular trauma: principles of assessment and management //JR Soc Med. 2006; 99(7): 351-354.

5. Kuhn F., Morris R., Witherspoon CD, et al.Serious eye injury: epidemiology and prognosis //Eye (Lond). 2006; 20(12): 1231-1238.

6. Negrel AD, Thylefors B.The global impact of eye injuries //Ophthalmic Epidemiol. 1998; 5(3): 143-169.

7. World Health Organization. International Statistical Classification of Diseases and Related Health Problems (ICD-11). Geneva: WHO; 2019.