

SOME FORENSIC-MEDICAL ASPECTS OF IRIDODIAGNOSTICS IN SUICIDE CASES

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Abstract: *The paper examines theoretical and practical aspects of using iridodiagnostics in forensic medical examinations of suicide cases. It analyzes the anatomical and physiological basis of the iris, methodological possibilities, and limitations of this approach in forensic practice. The study also proposes standardization criteria and methodological recommendations for expert evaluation. The results demonstrate the potential of iridodiagnostics as an auxiliary tool for identifying psychoemotional markers in suicide cases.*

Keywords: *forensic medical examination, iridodiagnostics, suicide, iris, psychoemotional markers, chronic intoxication, diagnostic signs.*

Introduction

Suicide remains one of the most serious public health and social problems worldwide. In forensic medicine, determining the causes and conditions of death requires the identification of specific biological markers, particularly in cases with unclear circumstances. Iridodiagnostics — the study of morphological changes in the iris — may provide valuable information on psychoemotional and somatic conditions preceding death.

Materials and Methods

A retrospective analysis of suicide cases was conducted using forensic archives, including autopsy data, forensic chemical examination (FChE) reports, and digital iris photographs obtained through iridoscopia. The data included autopsy

protocols, toxicology reports (alcohol, narcotics, psychotropics), and comparative analysis with a control group (individuals who died from natural causes). The applied methods were: retrospective analysis, iridological diagnostics, and comparative-analytical evaluation.

Results and Discussion

In 80% of suicide cases, iris dystrophy (thinning of trabecular structures and atrophic zones) was observed; 57% showed pigmentary changes in areas corresponding to the nervous and endocrine systems; 51% had vascular abnormalities (dilation and angiopathic changes). Correlation analysis revealed that 87% of depressive cases had uneven iris borders and hyperpigmentation; 55% of alcohol/drug users exhibited signs of chronic intoxication (radial furrows, stromal destruction); and 38% under psychotropic substances had discoloration and enhanced vascular networks. In the control group, such changes were rare: dystrophy — 25%, pigmentary — 20%, vascular — 15%.

These findings suggest that iridodiagnostics may reveal characteristic iris features correlated with psychoemotional stress and toxic exposure, supporting its potential as an auxiliary forensic diagnostic method.

Conclusion

Iridodiagnostics identifies distinctive morphological and pigmentary changes in the iris that correlate with psychoemotional disturbances, intoxication, and stress. While it cannot replace classical forensic methods, it may serve as an auxiliary diagnostic tool in evaluating suicidal predisposition and conducting retrospective analyses. Further standardization of diagnostic criteria and the development of reference databases are necessary for broader application in forensic medicine.

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