

MODERN METHODS FOR ASSESSING FORENSIC MEDICAL DIAGNOSTICS IN SUICIDAL WOMEN

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Abstract. *The term “suicide” in science usually refers to the concept of voluntary death. According to published statistics, suicide rates are currently on the rise in most countries around the world. But these data do not reflect the real scale of the problem, since only obvious, undisputed cases of suicide are included in official statistics. The number of real cases is many times higher than official statistics. This indicates not only the relevance, but also the global nature of this problem.*

Nowadays, everyone already knows that the iris of the eye is the most unsurpassed, among all body structures, a reflector of congenital deficiencies or characteristics fixed in human genetics.

It is considered proven that in the whole world it is impossible to find two people with absolutely identical faces. This is especially true in relation to the eyes, since each person’s iris is completely unique. It is so individual that it could provide an invaluable service to criminology and practical forensic medicine in matters of personal identification and even inherent congenital and acquired changes and the presence of diseases during life.

Keywords: *suicide, women, iridology, iris.*

Relevance The term “suicide” in science usually refers to the concept of voluntary death. According to published statistics, suicide rates are currently on the rise in most countries around the world. But these data do not reflect the real scale of the problem, since only obvious, undisputed cases of suicide are included in official statistics. The number of real cases is many times higher than official statistics. This indicates not only the relevance, but also the global nature of this problem [1,3,5].

In this regard, the search for markers that make it possible to identify individuals prone to suicidal states in order to carry out preventive measures with them in order to prevent suicide cases becomes especially relevant [4].

Purpose of the study: To develop prognostic iridodiagnostic markers in female suicide victims.

Materials and methods of research: The objects of the study were 9 corpses of women who committed suicide, 36 corpses of people who died suddenly, 33 living volunteers from among the students of Tashkent PMI. The subject of the study was the iridodiagnostic features of the corpses of women who committed suicide. The research was carried out on the basis of the Department of Forensic Medicine and Medical Law in the Republican Scientific and Practical Center for Medicinal Medicine of the Republic of Uzbekistan.

Study results: The most anterior part of the vascular tract, located between the cornea and the lens, is called the iris and has the appearance of a slightly elliptical plate or screen. Its peripheral edge extends beyond the corneal-scleral limbus, passing into the ciliary body. The horizontal diameter of the iris is 14.5 mm, the vertical diameter is 14 mm. The iris does not form a plane perpendicular to the anatomical axis of the eye. This is due to the fact that the pupillary edge is

slightly deflected forward, so the membrane as a whole has the appearance of a truncated and very flattened cone. The thickness of the iris varies and, on average, is 400 microns.

The role of the iris is not only to screen light, but also to form and drain intraocular fluid, ensuring a constant temperature of the moisture in the anterior chamber due to changes in the lumen of blood vessels.

The pupillary opening located in the middle of the iris performs the very important function of the diaphragm, reflexively regulating the amount of light entering the eye. As a result of continuous contractions of the pupil, the tissue of the iris is constantly in motion. The normal pupil width, which provides optimal conditions for high visual acuity, is 4 mm. It should be noted that the width of the pupil changes with age, in particular, in children under 1 year of age the pupil is quite narrow (up to 3 mm), it reacts poorly to light, the widest pupil becomes in adolescence and young adulthood, reaching a diameter of 4 mm. With old age, due to the loss of elasticity in the iris tissue, the pupil narrows, in parallel with which its ability to actively change its width is weakened.

The photoenergetic function of the iris is focused on regulating the level of energy potential of the reticular formation. The latter is carried out, on the one hand, by correcting the amount of light flux through changes in the diameter of the pupil, and on the other hand, by changing the threshold sensitivity of the photoreceptors of the iris itself.

According to modern concepts, the continuous autochthonous activity of reticular neurons is maintained due to their stimulation by afferent signals of different modalities, while afferent impulses of the retina are one of the dominant ones among a wide range of sensory modalities. According to morphological data, effective retinal signals and stimulate areas of the reticular formation in the brainstem, hypothalamus and spinal cord.

Currently, more than 50 schemes and projection zones of the iris are known, used in iridology.

The doctrine of somatotopy of the iris is associated with the name of J. Peczeli (1986), who first published a diagram of the projection of the human body on the iris.

Of the numerous schemes for the projection zones of the iris, the most recognized ones can be identified. These include a large group of German-American schemes with a vertical arrangement of the human body along the iris.

Another group of schemes, the New French one, is based on a different, embryological, plan for projecting the human body onto the iris.

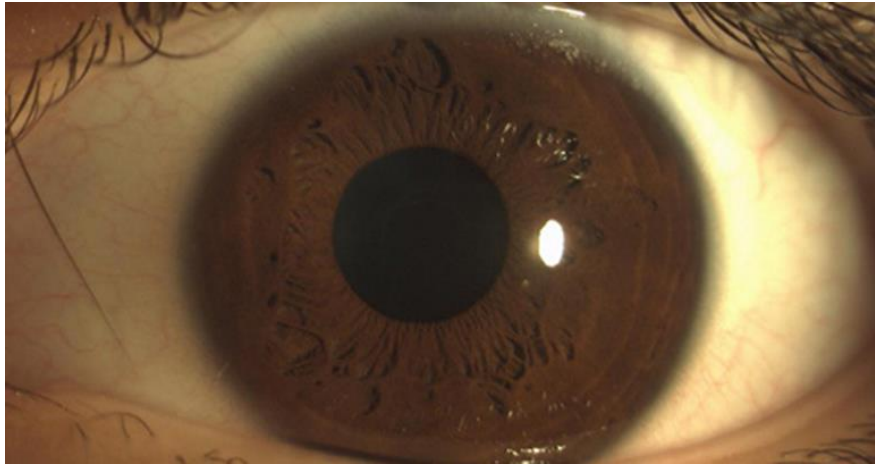
From the infinite number of structural combinations of the iris, reflecting the constitutional characteristics of a person, it is possible to identify several simple types; there are five of them in total.

In some people, the iris has the appearance of a fan, made up of thin, well-fitted trabecular fibers. This type is called radial.

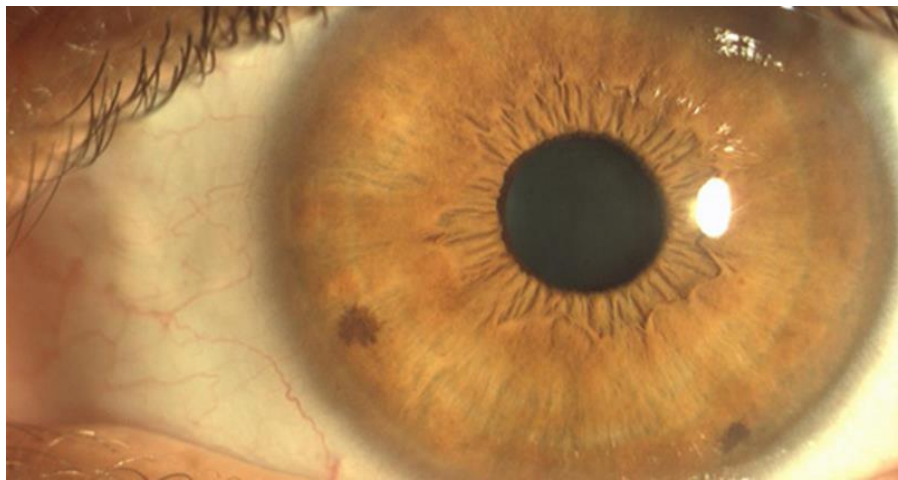
In people with light eyes (blue, gray, green) it occurs 10 times more often than in people with dark eyes.

According to our observations, among student volunteers, irises of “dark brown” (64.6%) and “light brown” (13.2%) colors predominated, and in the remaining cases (22.2%) there were faces with light (gray – 10.2%; blue – 3.7%; blue – 6.4% and green – 3.1%).

The irises of the colors we most often encounter are presented in Pictures 1.-3.



Pic.1. Iris is “dark brown” in color



Pic.2. Iris is “Light brown” in color



Pic. 3. Iris is “grey” in color

Among the 36 corpses of people who died suddenly that we examined, 8 (30.8%) had irises with radial striations.

The second type of iris has the appearance of radially extending and somewhat thickened trabeculae - the radially wavy type of iris. This is the so-called neurogenic type of constitution, which is characterized by asthenographic manifestations and a tendency to spasms. In our observations, both among living persons and among those who died suddenly, it was most common - in 37.6% of cases.

According to many iridologists, iridodiagnostics is fundamentally different from generally accepted methods of recognizing diseases. This is evidenced by the following characteristic features of iridodiagnostics: high information content, early detection of many pathological processes, expressiveness (quickness) of obtaining results, a unique opportunity to examine the relationships of human organs as a whole in one field of view (the so-called integral projection analysis), objectivity and sufficient accuracy of the method, simplicity and harmlessness of the study.

Conclusion: The iridodiagnostic features of persons prone to suicidal behavior include irises with weak or very weak density, locally deformed and rounded-thickened types of relief of the irises, deformations of the pupils, slugging of the autonomic rings, ruptures and deformations of the autonomic rings, pigment and toxic spots, adaptation rings, lymphotic rosaries and dystrophic rims.

REFERENCES

1. Velkhover E.S., Radysh B.B. About the photoreceptor function of the iris //VIII Congress of Ophthalmologists of Ukraine. Abstracts of the report. - Odessa. 1990. – P.161.
2. Naumova T.S. A systematic approach to understanding the role of the electric field of living organisms. /In the book: Physical biofields, biorhythms and their physical and mathematical models. – Kyiv, 1981. –S. 41-43.
3. Turdieva, K. S. (2017). FEATURES OF MODERN UZBEK CHILDREN'S POETRY. *Theoretical & Applied Science*, (10), 66-69.
4. Turdieva, K. Sh. (2016). Contemporary Uzbek children's poetry. Creativity of Miraziz Agzam. BBK 81.2 Ros, 170.
5. Turdieva, K., & Hamrakulova, M. UZBEKISTON REPUBLIC OF OLIY BA URTA MAHSUS TALIM VAZIRLIGI.
6. Kurbanov, B. (2019, March). The Modern Surgical Tactics of Vaginal Hysterectomy. In *REPRODUCTIVE SCIENCES* (Vol. 26, pp. 316A-316A). 2455 TELLER RD, THOUSAND OAKS, CA 91320 USA: SAGE PUBLICATIONS INC.
7. Kurbanov, B. B. (2017). Modern approach to surgical treatment of genital prolapse. *News of dermatovenerology and reproductive health*, (3-4), 74-76.
8. Kurbanov, B. (2016). 138 The role of vascular endothelial growth factor as markers of hypertension induced pregnancy: Angiogenic factors. *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health*, 6(3), 248.
9. Rasul-Zade, Y. G., & Shekhtman, M. M. (1999). Some features of Ca²⁺ homeostasis in pregnant women with underlying pathology and gestosis. *Bulletin of the Russian Association of Obstetricians and Gynecologists*, (2), 21-26.
10. Rasul-Zade, Yu. G., Duschanova, Z. A., & Klimashkin, A. A. (2012). Evaluation of the clinical effectiveness of serotonin reuptake inhibitors in the complex treatment of severe forms of premenstrual syndrome. *Graduate Physician*, 51(2.4), 544-554.
11. Rasul-Zade, Yu. G., Klimashkin, A. A., & Nazarov, B. B. (2012). To the question of the role of nitric oxide donors in various obstetric conditions. *Ukrainian Journal of Chemotherapy*, (3), 108-112.

12. Yuldasheva, D. S., Mukhamedkhanova, Sh. T., & Ishchenko, I. V. (2014). Estrogen production in adolescent girls with primary ovarian sclerocystosis. *Graduate Physician*, 64(3.2), 240-244.
13. Yuldasheva, D. S., Zokirkhodzhaeva, D. A., Ishchenko, I. V., Mukhamedkhanova, Sh. T., Akhmedova, D. R., & Mirkhoshimov, M. B. (2002). INFLUENCE OF CHRONIC TONSILLITIS ON THE CONDITION OF THE REPRODUCTIVE SYSTEM OF GIRLS WITH DYSFUNCTIONAL UTERINE BLEEDING. MINISTRY OF HEALTH OF THE REPUBLIC OF UZBEKISTAN TASHKENT PEDIATRIC MEDICAL INSTITUTE, 99.
14. Navruzova, R. S., Sultanov, S. N., & Yusupova, M. A. EARLY DIAGNOSIS OF CHRONIC CERVICITIS ASSOCIATED WITH HUMAN PAPILLOMA VIRUS IN PREGNANT WOMEN. LLC "Maxliyo-shifo" & V, 87.
15. Navruzova, R. S., & AiG, R. S. N. P. M. Ts. ALGORITHM FOR INVESTIGATION OF PREGNANT WOMEN WITH CERVICAL PATHOLOGY. LLC "Maxliyo-shifo" & V, 31.
16. Sultanov, S. N., Navruzova, R. S., & Yuldasheva, N. Sh. COMPARATIVE ASSESSMENT OF METHODS FOR DIAGNOSTICS OF CERVICAL PATHOLOGY IN PREGNANT WOMEN. LLC "Maxliyo-shifo" & V, 8.
17. Mukhamedkhanova, Sh. T., Yuldasheva, D. S., Mirzaeva, N. B., Zufarova, Sh. A., & Ishchenko, I. V. (2015). Pathogenetic features of allergies in preeclampsia in pregnant women. *Educatio*, (3 (10)-5).
18. Yuldasheva, D. S., Mukhamedkhanova, Sh. T., & Ishchenko, I. V. (2014). Estrogen production in adolescent girls with primary ovarian sclerocystosis. *Graduate Physician*, 64(3.2), 240-244.
19. Yuldasheva, D. S., Zokirkhodzhaeva, D. A., Ishchenko, I. V., Mukhamedkhanova, Sh. T., Akhmedova, D. R., & Mirkhoshimov, M. B. (2002). INFLUENCE OF CHRONIC TONSILLITIS ON THE CONDITION OF THE REPRODUCTIVE SYSTEM OF GIRLS WITH DYSFUNCTION UTERINE BLEEDING. MINISTRY OF HEALTH OF THE REPUBLIC OF UZBEKISTAN TASHKENT PEDIATRIC MEDICAL INSTITUTE, 99.
20. Rashidkhodjaeva, L. D., & Zufarova, Sh. A. (2024). ASSESSMENT OF THYROID INDICES IN WOMEN WITH AUTOIMMUNE THYROIDITIS DURING PREGNANCY.