

Forensic Medical Examination of Body Discharges

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Annotation. Forensic examination of physical evidence is important in the investigation of crimes. It plays a particularly important role in solving serious crimes against a person, such as murder, rape, etc. It helps the investigation to recreate the situation in which the crime was committed, to significantly judge the circle of suspects, and in some cases to irrefutably expose the culprit or, on the contrary, exclude the suspected person.

Key words: forensic medical examination, sperm, urine, saliva, organism.

Relevance. Forensic examination of physical evidence is important in the investigation of crimes. It plays a particularly important role in solving serious crimes against a person, such as murder, rape, etc. It helps the investigation to recreate the situation in which the crime was committed, to significantly judge the circle of suspects, and in some cases to irrefutably expose the culprit or, on the contrary, exclude the suspected person. All this fully applies to the study of traces of discharge on material evidence. It makes it possible, in particular, to establish their species identity, as well as to determine isoserological properties (group antigens), which in turn allows us to talk (though only in an alternative form) about the possible belonging of traces of secretions to a specific person (suspect, victim) or, on the contrary, categorically exclude this person. For example, traces of sperm on the body, clothes and other objects belonging to the victim, which coincide in their isoserological properties with the sperm of a rape suspect, can serve as serious and sometimes irrefutable evidence. Conversely, the discrepancy between these properties can sometimes decisively shake or completely refute the suspicions that have arisen. Forensic, investigative and judicial practice knows many cases when the results of a forensic examination of traces of human body secretions - semen, saliva, urine, sweat, etc. - on material evidence, carried out in connection with cases of serious crimes against the person, helped choose the right path of investigation, find the true criminal and avoid the gravest miscarriage of justice - the conviction of an innocent person. The study of traces of secretions on material evidence may be of interest to justice from two points of view. Firstly, the very fact of the presence of a particular discharge on material evidence may indicate the nature of the crime (for example, the presence of seminal stains on clothing or on bed linen in cases of suspected rape, indecent acts with minors, etc.) and the situation, in by which it was committed. Once detected, traces of secretions are examined to determine their group affiliation, which is then compared with the group affiliation of the secretions of both the suspect and the victim (victim). Secondly, the presence of traces of discharge may complicate the examination and interfere with the correct assessment of its results. This occurs when the secretions of one person are mixed with the secretions or blood of another, and these people have unequal antigenic characteristics. Determining the group affiliation of secretions when distinguishing between their "layered", mutually masking group properties becomes difficult and sometimes impossible. In addition,

such a situation, with insufficient experience of the researcher, can lead to an expert error: incorrect determination of the group affiliation of secretions, which in such cases entails serious consequences. The number of body secretions is significant. Theoretically, any of them can be imagined as an object of forensic medical examination. However, forensic and investigative practice shows that most often the expert has to find and differentiate the following secretions: sperm, saliva, urine, sweat, vaginal discharge, nasal discharge, human milk, and also differentiate them from traces of blood and pus. Other biological fluids are relatively rarely the subject of forensic medical examination. It should be taken into account that many works devoted to the study of body secretions were carried out by physiologists, clinicians and biochemists, i.e., researchers who were very far from forensic medicine and who set themselves completely different goals. Meanwhile, forensic medical examination of secretions has its own specifics and difficulties. Researchers (chemists, biochemists, clinicians and physiologists), proposing methods for detecting one or another ingredient in secretions, worked under the conditions of the so-called pure experiment. They examined the secretions in a fresh, liquid form, in the absence of contamination, they knew exactly the object of study, they knew which person or animal the biological fluid under study belonged to, and had all the necessary information about the donor. A forensic expert who examines secretions on material evidence is in a completely different position. He does not know what results will be obtained when conducting certain studies, since he almost always deals with material evidence on which traces have already dried, does not know in advance what kind of biological object he is studying, whether the object belongs to a healthy or sick person, when it was formed traces on the material evidence, in what conditions it was stored. Very often, the object under study contains different secretions (often from different people), there is an admixture of blood, random contaminants, etc. In addition to the biological properties characteristic of a particular secretion (individual characteristics of the person to whom it belongs), various external influences are of great importance, including washing, ironing, rotting, etc. All this creates difficulties for conducting a forensic medical examination. However, forensic science has been able to adapt them to suit their purposes. This allows in some cases to overcome difficulties that arise when studying expert material. For a forensic expert, it is extremely important to master reliable methods that allow one to establish on physical evidence the presence, species and group affiliation of secretions of the human body in pure form and in a mixture with blood and with each other, as well as to differentiate one secretion from another.

Of all the secretions of the human body, sperm is most often the object of forensic examination. This can be explained, firstly, by the relative frequency of criminal and civil cases, in connection with which there is a need to carry out such examinations, and secondly, by the fact that, since approximately the middle of the last century, experts have had well-developed, reliable methods for establishing traces of semen as in liquid form and in the form of traces on physical evidence. Establishing the presence of sperm is most often necessary when conducting an examination in criminal cases initiated in connection with the commission of sexual crimes. The detection of semen on physical evidence in such cases can play a decisive role. Sperm can be detected by extracting them from traces on physical evidence, on-site examination (coloring directly in the traces themselves), obtaining fingerprints, etc.

In forensic medical examination, there are cases when judicial investigative authorities raise the question of the presence of saliva or, more often, traces of it on material evidence. In such cases, the objects of examination may be pieces of textile or knitted fabrics or other objects that the criminal used to cover his victim's mouth to muffle her scream. Sometimes in cases of

strangulation, the question arises about the presence of saliva on the victim's clothing or on the noose that was used to compress the neck.

The carriers of traces of saliva, which are often the object of research, are cigarette butts found at the scene of an incident. Sometimes the presence of saliva has to be determined on the flaps of envelopes; these examinations are associated with the receipt of anonymous letters by one or another addressee. When investigating domestic conflicts, it may be necessary to search for saliva or its traces in food, products, medicine and on various household items. There may be other reasons for establishing the presence of saliva in connection with criminal cases. Sometimes food remains are found at the scene of an incident (baked goods, meat and dairy products, fruits, vegetables, etc.), on which the presence of saliva can be assumed (for example, in places where they were bitten or where there is a mark from a spoon that was previously taken in the mouth). First of all, the influence of the carrier object on the saliva detection reaction and on the absorption reaction is determined. If the carrier object does not affect the reactions, then a part of the object, where the presence of saliva is expected, and another part of it, a control) distant from the first and taken in the same quantity, are placed in separate test tubes.

In forensic medical practice, there is sometimes a need to establish the presence and grouping of urine. The object of examination can be either a liquid in which urine is suspected, or traces of urine left on physical evidence. Reasons for urine testing may vary. Its stains are often found on clothes sent for examination in cases of sexual crimes. In such cases, it is necessary to be able to detect them in order to judge the influence of group antigens contained in the victim's urine on the results of the study of semen stains and on the assessment of the study results. Finding traces of urine on clothing found anywhere can help identify who it belonged to. Thus, body fluid forensics requires serious research in terms of the rigor and reliability and effectiveness of expert evaluation.

Literature

1. Abdulloyevich S. A., Abdulloyevna S. L. To establish the morphofunctional features of changes in the cellular composition of the lymphoid tissue of the spleen //ResearchJet Journal of Analysis and Inventions. – 2022. – T. 3. – №. 1. – C. 104-111.
2. Abdulloyevich S. A. STUDY OF THE EFFECT OF WHITE RATS WITH ANTI-INFLAMMATORY DRUGS ON THE MORPHOMETRIC STATE OF THE LYMPHOID NODES OF THE SMALL INTESTINE //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. – 2022. – T. 2. – №. 10. – C. 126-131.
3. Abdulloyevich S. A. et al. Data From Foreign Literature on The Morphofunctional Properties of Lymphoid Cells Of The Spleen //Journal of Advanced Zoology. – 2023. – T. 44. – №. S7. – C. 36-40.
4. Saidov A. A. HISTOPATOLOGY OF THE SPLEEN IN POLYPRAGMASIA //ZAMONAVIY TA'LIM: MUAMMO VA YECHIMLARI. – 2022. – T. 1. – C. 211-214.
5. Saidov A. A. Morphological Changes of the Spleen with Polypragmasia //Procedia of Social Sciences and Humanities. – 2022. – T. 4. – C. 23-24.
6. Saidov A. A. TALOQDA POLIPRAGMAZIYADA YUZAGA KELADIGAN MORFOMETRIK O'ZGARISHLAR //ZAMONAVIY TA'LIM: MUAMMO VA YECHIMLARI. – 2022. – T. 1. – C. 247-249.
7. Abdulloyevich S. A. To Study Morphometric Parameters of Lymphoid Tissue of the Spleen of White Healthy Rats in Postnatal Ontogenesis from three Months to Six

- Months of Age //INTERNATIONAL JOURNAL OF HEALTH SYSTEMS AND MEDICAL SCIENCES. – 2022. – Т. 1. – №. 4. – С. 104-108.
8. Abdullaevich S. A. Bronchopneumonia as a Complication of Coronavirus Infection //Eurasian Medical Research Periodical. – 2022. – Т. 15. – С. 43-46.
 9. Саидов А. А. МОРФОЛОГИЧЕСКИЕ ИЗМЕНЕНИЯ СЕЛЕЗЕНКИ ПРИ ПОЛИПРАГМАЗИИ //International Conference on Research Identity, Value and Ethics. – 2022. – С. 88-91.
 10. Хайдарова Н. А. Морфологическая И Морфометрическая Характеристика Щитовидной Железы При Полипрагмазии Противовоспалительными Препаратами //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – Т. 1. – №. 7. – С. 151-155.
 11. Akhtamovna K. N., Muyitdinovna K. S. Ischemic Heart Disease in Path Anatomic Practice: Cardio Sclerosis //European Multidisciplinary Journal of Modern Science. – 2022. – Т. 5. – С. 402-406.
 12. Muyitdinovna X. S. The role of hyperhomocysteinemia in the development of cognitive disorders in chronic brain ischemia //Web of scientist: international scientific research journal. – 2022. – Т. 3. – №. 8. – С. 442-453.
 13. Muyitdinovna X. S. The role of hyperhomocysteinemia in the development of cognitive impairment in chronic cerebral ischemia //Web Sci. Int. Sci. Res. J. – 2022. – Т. 3. – С. 421-428.
 14. Muyitdinovna X. S. Analysis of maternal mortality in the practice of pathological anatomy //Web of scientist: international scientific research journal. – 2022. – Т. 3. – №. 8.
 15. Kadirovna K. D., Muyitdinovna X. S. ELEVATED HOMOCYSTEIN LEVELS AS A RISK FACTOR FOR THE DISEASE IN CEREBRAL ISCHEMIA //World Bulletin of Public Health. – 2023. – Т. 21. – С. 117-120.
 16. Муйитдиновна Х. С. СУД ТИББИЙ АМАЛИЁТИДА ЖИГАР ЦИРРОЗИ УЧРАШИ ВА СТАТИСТИК ТАҲЛИЛИ //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2023. – Т. 2. – №. 5. – С. 355-361.
 17. Muyitdinovna K. S. Ovarian Cysts in Women of Reproductive Age //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – Т. 1. – №. 7. – С. 225-228.
 18. Muyitdinovna K. S. Pathogenetic Types and Principles of Treatment of Dyscirculatory Encephalopathy //Research Journal of Trauma and Disability Studies. – 2023. – Т. 2. – №. 9. – С. 72-79.
 19. Muyitdinovna, X. S. (2023). Modern Aspects of the Etiology of Acute Intestinal Infections. *American Journal of Pediatric Medicine and Health Sciences* (2993-2149), 1(3), 102–105. Retrieved from <https://grnjournal.us/index.php/AJPMHS/article/view/197>
 20. Muyitdinovna K. S. Prevalence and Epidemiology of Brain Cancer in Bukhara Region //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – Т. 1. – №. 7. – С. 220-224.
 21. Kadirovna K. D., Muyitdinovna X. S. The role of hyperhomocysteinemia in chronic ischemic stroke : дис. – Antalya, Turkey, 2022.
 22. Akhtamovna K. N. Modern View on the Influence of Antitumor Therapy on the Activity of the Thyroid Gland //Scholastic: Journal of Natural and Medical Education. – 2023. – Т. 2. – №. 5. – С. 50-54.

23. Muyitdinovna K. S. Prevalence and Epidemiology of Brain Cancer in Bukhara Region //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – Т. 1. – №. 7. – С. 220-224.
24. Axtamovna H. N. Study of the Influence of Stress Factors on Animals //American Journal of Pediatric Medicine and Health Sciences. – 2023. – Т. 1. – №. 3. – С. 106-111.
25. Хайдарова Н. А. Морфологические Изменения Сердца У 6-Месячных Белых Беспородных Крыс Под Влиянием Энергетического Напитка //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2022. – Т. 1. – №. 7. – С. 142-146.
26. Khaidarova N. MODULAR TECHNOLOGY FOR TEACHING STUDENTS IN THE SCIENCE OF FORENSIC MEDICINE //Естественные науки в современном мире: теоретические и практические исследования. – 2022. – Т. 1. – №. 24. – С. 103-106.
27. Khaidarova N. ATHEROSCLEROSIS OF CORONARY VESSELS WITH NORMAL MACRO AND MICROSTRUCTURE OF THE THYROID GLAND IN PRACTICALLY HEALTHY PERSONS //Инновационные исследования в современном мире: теория и практика. – 2022. – Т. 1. – №. 24. – С. 606-608.
28. Mustafoevich S. O., Akhtamovana K. N. MEETING OF KIDNEY CYSTERS IN COURT MEDICAL AUTOPSY PRACTICE //Web of Scientist: International Scientific research Journal. – 2022. – №. 3. – С. 6.
29. Mustafoevich S. O., Akhtamovana K. N. Epitelial safe tumors of bladder rate, types and causes //Web of Scientist: International Scientific research Journal. – 2022. – №. 3. – С. 6.
30. Muidtinovna, K. S., & Rakhimovich, O. K. (2023). Forensic Medical Assessment and Statistical Analysis of Mechanical Asphyxia. *International Journal of Integrative and Modern Medicine*, 1(3), 21–24.
31. Khaidarova Nargiza Akhtamovna. (2023). Modern Aspects of Morphological Features of the Thyroid Gland in Autoimmune Thyroiditis. *International Journal of Integrative and Modern Medicine*, 1(3), 47–51. Retrieved from <https://medicaljournals.eu/index.php/IJIMM/article/view/95>
32. Xaydarova Nargiza Axtamovna. (2023). HASHIMOTO TIREOIDITIDA QALQONSIMON BEZNING MORFOLOGIK XUSUSIYATLARI. *AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI*, 2(11), 247–252. Retrieved from <https://sciencebox.uz/index.php/amaltibbiyot/article/view/8514>
33. Kadirovna K. D., Muyitdinovna X. S. ELEVATED HOMOCYSTEIN LEVELS AS A RISK FACTOR FOR THE DISEASE IN CEREBRAL ISCHEMIA //World Bulletin of Public Health. – 2023. – Т. 21. – С. 117-120.
34. Axtamovna H. N. Effect of Hemodialysis Therapy on Heart Rhythm //Scholastic: Journal of Natural and Medical Education. – 2023. – Т. 2. – №. 5. – С. 326-331.
35. Axtamovna H. N. Effect of Hemodialysis Therapy on Heart Rhythm //Scholastic: Journal of Natural and Medical Education. – 2023. – Т. 2. – №. 5. – С. 326-331.
36. Kadirovna K. D., Muyitdinovna X. S. The role of hyperhomocysteinemia in chronic ischemic stroke : дис. – Antalya, Turkey, 2022.
37. Muyitdinovna X. S. Modern Concepts on the Effect of Alcohol Intoxication on the Activity of the Heart //Scholastic: Journal of Natural and Medical Education. – 2023. – Т. 2. – №. 5. – С. 332-338.

38. Муйитдиновна Х. С. Суд Тиббий Амалиётида Механик Асфиксиялардан Чўкишнинг Учраши Ва Статистик Таҳлили //AMALIY VA TIBBIYOT FANLARI ILMIY JURNALI. – 2023. – Т. 2. – №. 11. – С. 403-406.
39. Rakhimovich O. K. CHARACTERISTICS OF MORPHOMETRIC AND ULTRASTRUCTURAL STRUCTURE OF LIVER HEPATOCYTES. – 2023.
40. Очилов К.Р., Каюмов Ж.Т. Ультраструктурные изменения печени крыс при пероральном введении солей тяжёлых металлов. “Пути совершенствования судебной экспертизы. Зарубежный опыт” Материалы научно-практической конференции 15-16 ноября 2017 г. Ташкент. С. 175.
41. Очилов К. Р. Влияние ионов кадмия и кобальта на дыхание митохондрий печени крыс //Новый день в медицине. – 2020. – №. 2. – С. 710-712.
42. Очилов К. Р. Изучение Влияние Солей Тяжелых Металлов На Биохимические Процессы Митохондрий Печени Крыс //Central Asian Journal of Medical and Natural Science. – 2021. – С. 383-387.
43. Очилов К. Р. СТРУКТУРНОЕ СТРОЕНИЕ КЛЕТОК ТКАНИ ПЕЧЕНИ ПРИ ВОЗДЕЙСТВИИ КАДМИЯ //Новости образования: исследование в XXI веке. – 2023. – Т. 1. – №. 7. – С. 372-377.
44. Очилов К. Р. ВЛИЯНИЕ СВИНЦА НА ОРГАНИЗМ ЧЕЛОВЕКА И ЖИВОТНЫХ //ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ. – 2023. – Т. 18. – №. 7. – С. 89-93.
45. ОЧИЛОВ К. Р. и др. ДЕЙСТВИЕ БУТИФОСА НА ТРАНСПОРТ Ca²⁺ В МИТОХОНДРИЯХ ПЕЧЕНИ КРЫС //Доклады Академии наук УзССР. – 1985. – Т. 45.
46. Наврузов Р. Р., Очилов К. Р. МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ ЛИМФОИДНЫХ СТРУКТУР ТОЛСТОЙ КИШКИ ПРИ ЛУЧЕВОЙ БОЛЕЗНИ //Scientific progress. – 2022. – Т. 3. – №. 1. – С. 728-733.
47. Тешаев Ш. Ж., Очилов К. Р. МОРФОФУНКЦИОНАЛЬНЫЕ ОСОБЕННОСТИ МИТОХОНДРИЙ ПЕЧЕНИ КРЫС ПРИ ОТРАВЛЕНИИ БУТИЛКАПТАКСОМ //Новый день в медицине. – 2020. – №. 2. – С. 715-717.
48. Ochilov Kamil Rakhimovich Issues of Physical Health of Young People Intersections of Faith and Culture: AMERICAN Journal of Religious and Cultural Studies *Volume 01, Issue 02, 2023 ISSN (E): XXX-XXX*
49. Ochilov Komil Rahimovich Khaidarova Nargiza Akhtamovna Morphological and Morphometric Characteristics of the Thyroid Gland Polypharmacy Anti-inflammatory Sensors SCHOLASTIC: Journal of Natural and Medical Education *Volume 2, Issue 5, Year 2023 ISSN: 2835-303X <https://univerpubl.com/index.php/scholastic>*
50. Ochilov Komil Rakhimovich Khatamova Sarvinoz Muidtinovna, Forensic Medical Assessment and Statistical Analysis of Mechanical Asphyxia IJIMM, Volume 1, Issue 3, 2023 ISSN: XXXX-XXXX <http://medicaljournals.eu/index.php/IJIMM/issue/view/3> Kamil Rakhimovich Ochilov Studying The Effect Of Heavy Metal Salts On Biochemical Processes Of Rat Liver Mitochondria DOI: 10.47750/pnr.2022.13.S07.230
51. Ochilov Kamil Rakhimovich Effects of Heavy Metal Salts in Biochemical Processes, Rat Liver Mitochondria .American Journal of Science and Learning for Development ISSN 2835-2157 Volume 2 | No 1 | January -2023 Published by inter-publishing.com

