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КАФЕДРА КЛІНІЧНОЇ ЛАБОРАТОРНОЇ ДІАГНОСТИКИ**



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Diagnostic and prognostic value of various markers of endogenous intoxication in cases of peritonitis. *Efferent Therapy*, 8, 49–52.

22. Qiu, S., Cai, Y., Yao, H., Lin, C., Xie, Y., Tang, S., & Zhang, A. (2023). Small molecule metabolites: discovery of biomarkers and therapeutic targets. *Signal transduction and targeted therapy*, 8(1), 132. <https://doi.org/10.1038/s41392-023-01399-3>.

23. Shitov, A. Yu. (2013). Middle-mass molecules as an indicator of "hyperbaric intoxication" in divers. *Al'manakh Klinicheskoy Meditsiny*, (28), 48–52.

24. Sikora, J. P., Karawani, J., & Sobczak, J. (2023). Neutrophils and the Systemic Inflammatory Response Syndrome (SIRS). *International journal of molecular sciences*, 24(17), 13469. <https://doi.org/10.3390/ijms241713469>.

25. Vydyborets' S. V. (2002). Clinical significance of serum levels of medium size molecules in patients with iron deficiency anemia. *Likars'ka sprava*, (1), 60–63.

26. Winchester, J. F., & Audia, P. F. (2006). Extracorporeal strategies for the removal of middle molecules. *Seminars in dialysis*, 19(2), 110–114. <https://doi.org/10.1111/j.1525-139X.2006.00135.x>

27. Zhang Y. (2018). Cell toxicity mechanism and biomarker. *Clinical and translational medicine*, 7(1), 34. <https://doi.org/10.1186/s40169-018-0212-7>.

28. Zong, Y., Li, H., Liao, P., Chen, L., Pan, Y., Zheng, Y., Zhang, C., Liu, D., Zheng, M., & Gao, J. (2024). Mitochondrial dysfunction: mechanisms and advances in therapy. *Signal transduction and targeted therapy*, 9(1), 124. <https://doi.org/10.1038/s41392-024-01839-8>.

DIABETES MELITIS AS A DISEASE OF CIVILIZATION

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Over the past 30 years, there has been a sharp increase in the prevalence and incidence of diabetes mellitus (DM), especially in industrialized countries, which

accounts for 5-6% of the human population. According to WHO estimates, the number of people in the world suffering from DM in 2000 was 151 million, by 2010 the number of patients will reach 221 million, and by 2025 this number will increase to 330 million, which gives grounds to talk about a “global diabetes epidemic”. In Ukraine, there are about 1 million patients with DM, so the current situation with this pathology in the world and in Ukraine prompts us to pay attention to the current state of the problem. Modern life is comfortable, faster, with an increasing level of communication in all age groups. The general technical and communication load also significantly affects each person and humanity as a whole. In such conditions, a person's adaptation to such modern life more often occurs. Unhealthy nutrition, bad habits, and smoking are factors that lead to the occurrence of both obesity and diabetes.

In order to qualitatively study the patient's condition and the complex metabolic changes that occur in diabetes, the issue of preventing the occurrence of complications of diabetes with the development of chronic micro- and macrovascular complications is relevant.

According to the international classification distinguish There are two main forms of diabetes: insulin-dependent (or type I), when the body insulin synthesis is completely stopped and daily injections are necessary to maintain its level in the blood . This type of diabetes develops, as a rule, in children and people under 40 years of age , begins acutely, proceeds unstable with possible ketoacidosis (acetone in the urine). Such patients make up only 10–13% of the total number of patients with diabetes. With insulin-independent (or type II) the body produces enough insulin, but it is not absorbed and to maintain a normal level of sugar in the blood necessary stimulation beta-cell, this form of diabetes most often occurs between the ages of 50 and 70, is characterized by gradual development, stable leakage, absence Ketosis. This type is the most common form of diabetes, is characterized by relative insulin deficiency and is very often combined with obesity.

In order to prevent the occurrence of diabetes, as a disease of civilization, it is necessary to talk about a healthy lifestyle, physical activity, balanced nutrition,

adequate sleep, daily consumption of at least 500 g of fresh vegetables, herbs and fruits. Before each meal, drink 1–2 glasses of clean water, limit the consumption of animal fats, eliminate sugar and its synthetic substitutes, prevent the occurrence of diabetes.

RELEVANCE OF LABORATORY RESEARCH IN MODERN MEDICINE

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In modern medicine, laboratory diagnostics is an integral part of the diagnostic process. Thanks to modern laboratory research methods, it is possible to timely determine the initial changes in the functioning of certain systems of the human body. The results of laboratory tests are informative and significant, both in the diagnostic aspect and in the choice of treatment tactics, taking into account the individual nature of the changes for each patient.

In clinical laboratory diagnostics, a comprehensive approach to diagnosing changes is used with the appointment of various types of laboratory tests: general clinical, biochemical, immunological, serological, hematological, coagulological, microbiological, parasitological, toxicological, and forensic examination. An important basis for laboratory diagnostics is information about the patient's condition at the cellular and molecular levels. This allows doctors to better understand the etiology and pathogenesis of the disease.

In order to qualitatively study the patient's condition and changes occurring during the disease, the family doctor prescribes a number of laboratory tests during the patient's outpatient visit. In terms of the amount of information provided, laboratory tests are in the first place among all diagnostic tests, therefore, thanks to changes in laboratory parameters of biological fluids, the causes of changes in the patient's condition are established, the form and severity of the disease are assessed, the dynamics of changes during the patient's treatment are determined, the clinical