**МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ**
**БУКОВИНСЬКИЙ ДЕРЖАВНИЙ МЕДИЧНИЙ УНІВЕРСИТЕТ»**

# М А Т Е Р І А Л И

**105-ї підсумкової науково-практичної конференції**
**з міжнародною участю**
**професорсько-викладацького персоналу**
**БУКОВИНСЬКОГО ДЕРЖАВНОГО МЕДИЧНОГО УНІВЕРСИТЕТУ**
**присвяченої 80-річчю БДМУ**
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Матеріали підсумкової 105-ї науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) – Чернівці: Медуніверситет, 2024. – 477 с. іл.

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У збірнику представлені матеріали 105-ї підсумкової науково-практичної конференції з міжнародною участю професорсько-викладацького персоналу Буковинського державного медичного університету, присвяченої 80-річчю БДМУ (м. Чернівці, 05, 07, 12 лютого 2024 р.) із стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним проблемам фундаментальної, теоретичної та клінічної медицини.



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((lymphocytes+monocytes+eosinophils+basophils),%). The peripheral blood IRB score was determined.

**Results.** According to the results of the study, it was found that in patients with DFS there is a difference of the IRB levels depending on the presence or absence of trophic ulcer. For DFS without trophic ulcer, the average IRB was 59.90±2.87, while for DFS with trophic ulcer - 42.25±2.48 ($p<0.005$). Moreover, the level of IRB for DFS with trophic ulcer was probably different ($p_k<0.005$) from the control indicators (reference values) too – 128.45±9.02. The more severe course of DFS with a low level of IRB was confirmed clinically: the occurrence of a trophic ulcer, the increase of local inflammation, the development of phlegmon; and laboratory findings (increase of the level of peripheral blood leukocytes, leukocyte intoxication index, C-reactive protein). The outpatient study of the archival material confirmed the suggested method of predicting the course of DFS: before the appearance of trophic foot ulcer, patients experienced a decrease of IRB. Thus, at the IRB level below 55 e.u. DFS unfavourable course is predicted, and if reduction of IRB to 40-45 e.u. is observed – DFS complicated course with trophic ulcer occurrence is predicted.

**Conclusions**: The obtained data from clinical observations confirm that the decrease of IRB can serve as a predictor of DFS complicated course.

**Kolodnitska T.L.**

## NEW APPROACHES TO ASSESSMENT OF PROGNOSIS IN PATIENTS WITH ACUTE CORONARY SYNDROME

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**Introduction.** Cardiovascular disease is a leading cause of mortality worldwide. It is caused mainly by atherosclerosis, a chronic inflammatory disease of blood vessels wherein the immune response interacts with metabolic disorders to generate and activate endothelium lesions. Much evidence has suggested that chronic inflammation plays a critical role in the pathogenesis of atherosclerosis. Immune cells, including neutrophils, monocytes, lymphocytes, and mast cells infiltrate the atherosclerotic lesions and initiate a cytokine cascade. That is why scientists are trying to find and research new markers of inflammation intensity that are convenient in everyday clinical practice.

**The aim of study.** To analyze inflammatory indicators based on the absolute count of different inflammatory cells for assessment of prognosis in patients with acute coronary syndrome.

**Material and methods.** Informational-analytical, content-analysis.

**Results.** Inflammation is caused by infectious and non-infectious agents. The human body defends itself against them through a passive and active immune responses. The passive response includes all mechanisms that are functionally active all the time, or initiated after the cells are exposed of harmful agents. To assess the intensity of this process, it is proposed to determine lymphocyte to monocyte ratio (LMR), platelet to lymphocyte ratio (PLR), neutrophil to lymphocyte ratio (NLR). These indicators are considered to be inexpensive and easily accessible biomarkers that are associated with increased risk of coronary artery disease, stroke, and overall death. However, the search for a new integral marker that would simultaneously take into account changes in the number of all cells of the immune response continues. Recently, a new indicator has emerged called the systemic inflammatory response index (SIRI). SIRI is a composite index based on the absolute count of neutrophils, monocytes, and lymphocytes, and it is highly associated with cancer, hyperuricaemia, rheumatoid arthritis, and stroke. Elevated SIRI values are related to an increased risk of myocardial infarction (MI) and overall death. However, whether SIRI is an independent risk factor for adverse prognosis in patients with acute coronary syndrome (ACS) is still unknown. The number of ACS patients undergoing percutaneous coronary intervention (PCI) increases annually, so this question remains open. Also one of the new indicators for assessing systemic inflammation is the systemic immune-inflammation index (SII). This parameter is calculated by multiplying the number of platelets and neutrophils divided by the number of lymphocytes. Researchers showed that higher SII values in patients may be correlated with a worse prognosis of different type of

cancer. Such results, according to the researchers, were related to increased inflammation caused by strong activation of the immune system. Other scientists showed elevated SII values in patients with acute myocardial infarction. The course of myocardial infarction is associated with complex processes leading to increased breakdown of endothelial cells of blood vessels in the heart as well as breakdown of myocytes in the ischemic area. This leads to an intensification of the inflammatory response, which leads to an increase in, among others, number of neutrophils, monocytes, and platelets in the circulating pool. However, there is still insufficient data on whether SII is an indicator of adverse prognosis in patients with ACS.

**Conclusions.** Today, there have been several new methods of assessing the intensity of inflammatory processes and the activity of the development of atherosclerosis. Among them are such indicators as SIRI and SII. However, their capabilities in predicting the condition of patients with acute coronary syndrome require a more detailed study.

**Lukashevych I.V.**

## CHANGE OF PRO- AND ANTIOXIDANT SYSTEMS OF BLOOD IN PATIENTS WITH STEATOHEPATOSIS AFTER USING "HEPTRAL"

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**Introduction.** Steatohepatosis (SH) is polyetiological chronic diffuse liver disease which is characterized by a significant decrease of the number of functioning hepatocytes, progressive fibrosis, restructuring parenchymal and vascular architectonics of liver, forming nodes and further developing of liver failure and portal hypertension.

**The aim of the study.** The purpose of the research is to explore changes pro- and antioxidant systems of blood in patients with steatohepatosis of the liver which is influenced by complex treatment with the help of pills "Heptral".

**Material and methods**. The main group consisted of 25 patients with the SH, which together with basic therapy received "Heptral" (Public joint stock company "Abbive" (It) registration certificate № UA / 6993/01/02) 1000 mg dose (2 tablets) for the first 5-7 days during staying in hospital with the next dose reduction to 500 g (1 tablet) for 14-16 days. The comparative group included 20 patients with steatohepatosis, to whom a generally accepted basic therapy according to the Decree of the Ministry of Health of Ukraine №1051 of 28.12.2009 "About the granting of medical aid to gastroenterological patients" was intended. Research in oxidant-antioxidant system of blood was conducted by measuring the concentration of reduced glutathione, catalase activity and the content of reaction products of thiobarbituric acid in the blood. The effectiveness of treatment in all patients was assessed on 14-16 days.

**Results**. In patients, administered with "Heptral", improvement in health in earlier periods in comparison with the patients of comparative group was noted. Blood catalase activity significantly increased after treatment in the patients who took "Heptral" in 26.4% on average ($p<0.01$) compared to the treatment. Also, the patients of the main group were observed a significant increase of 41.1% ($p <0.01$) concentrations of reduced glutathione in the blood. Against the background of these changes in blood antioxidant systems in patients to whom "Heptral" for complex treatment was included, a decrease by 15.5% ($p <0.05$) of the reaction of products thiobarbituric acid in the blood was noted.

**Conclusions**. The including of "Heptral" to complex treatment to patients with steatohepatosis promotes faster reduction of clinical manifestations of the disease and better dynamics recovery blood antioxidant systems.