

CABG operation, while in 2 patients PCI was performed. In patients with middle part and distal involvement stenting was more common (10 operations out of 24 (41.6%), while 14 (58.4%) patients received traditional CABG surgery.

**Conclusions.** This study demonstrates that patients with LMCA disease were characterized by significantly higher number of stenotic coronary segments and vessels and higher incidence of CABG in comparison with non-LMCA group. However PCI becomes a more common and effective treatment method in this patient group, especially in distal LMCA involvement. We recommend prospective large-scale studies to develop a predictive model of obstructive LMCA disease.

#### LITERATURE

1. Left Main Coronary Artery Disease: Secular Trends in Patient Characteristics, Treatments, and Outcomes / P. H. Lee, J. M. Ahn, M. Chang [et al.] // Journal of the American College of Cardiology. – 2016. – Vol. 68, № 11. – P. 1233–1246.

## LEUKOCYTE INDEXES IN PATIENTS WITH COMMUNITY ACQUIRED PNEUMONIA

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**Relevance.** Pneumonia is a group of acute infectious diseases of the lungs with varying etiologies, pathogenesis, and morphological characteristics. Occasionally, standard blood tests might not reveal clear abnormalities even when endogenous intoxication is present. In some patients, acute forms of disease may transition to chronic pathology due to a decrease in the body's adaptive capacity [1].

To analyze endogenous intoxication in inflammatory processes special leukocyte indices and formulas can be used. [2]

**Target.** To express changes in the leukocyte indexes in patients with community acquired pneumonia.

**Research methods.** A retrospective analysis included 119 CAP patients (mean age  $30.8 \pm 8.8$  years) at City Clinical Hospital No. 2 of Grodno. All were evaluated according to Ministry of Healthcare diagnostic and treatment protocols.

Laboratory analysis was performed on two samples, before and after treatment, with leukocyte indexes calculated: Index of allerginization (IA), Garkavi adaptation index, Krebs index, nuclear shift index (NSI), resistance index (RI) and leukocyte intoxication index (LSI). Ratios such as leukocyte/ESR, neutrophil/monocyte (NMR) lymphocyte/monocyte (LMR), lymphocyte/eosinophil (LER), and neutrophil/lymphocyte (NLR) were assessed as novel inflammatory markers reflecting immune system phases. Peak expiratory flow (PEF) was measured as a percentage of normal on days 4–5 after admission.

The obtained data were processed using nonparametric statistical methods. The data in the work are presented as Me (25% and 75%). The level was considered reliable at  $p < 0.05$ .

**Results and their discussion.** Before treatment, indexes IA, Krebs, RI, Leukocyte to ESR, NMR, NLR, LMR all were significantly decreased from the norm. NSI, LII and LER were elevated before treatment, while the Garkavi index remained within normal limits.

After treatment, indexes IA, leukocyte to ESR, NLR, LMR showed a relative significant increase but remained below normal. RI relatively rose significantly to normal limits. Garkavi index was increased to a higher than norm value. Krebs index, NSI, NMR all showed a relative significant decrease from previous value. LII relatively decreased significantly but remained higher than the norm. Further, LER drastically increased.

The Spearman correlation coefficient showed a moderate positive relationship between PEF and LMR ( $r=0.37$ ), and a weak positive relationship between PEF and NMR ( $r=0.22$ ).

**Conclusions.** Elevated NSI and LII indicate endo-toxicosis, while high LII suggests a notable bacterial component in endogenous intoxication. The decrease of Garkavi index after treatment can be owed to the decrease of neutrophils or increase of lymphocytes. Significantly high LER indicates a higher probability of development of immediate hypersensitivity reactions.

#### LITERATURE

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2. Role of leukocytes and systemic inflammation indexes (NLR, PLR, MLP, dNLR, NLPR, AISI, SIR-I, and SIR-II) on admission predicts in-hospital mortality in non-elderly and elderly COVID-19 patients / H. Ghobadi, J. Mohammadshahi, N. Javaheri [et al.] // Frontiers in Medicine. – 2022. – Vol. 9. – P. 916453.

## CLINICAL PROFILE OF PATIENTS WITH MYOCARDIAL INFARCTION WITH AND WITHOUT ST SEGMENT ELEVATION

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**Relevance.** Acute coronary syndromes (ACS) encompass a range of conditions, including ST-elevation myocardial infarction (STEMI), non-ST elevation myocardial infarction (N-STEMI), and unstable angina. STEMI and N-STEMI differ primarily in their presentation, ECG findings, and laboratory markers, with STEMI typically