

LEUKOCYTE INDICES IN ELDERLY GROUP OF PATIENTS WITH A STABLE CORONARY ARTERY DISEASE

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Relevance: Coronary artery disease is the most frequent cause of death in the world; however, with correct diagnosis 80% of coronary events can be prevented. At the present time, along with the generally accepted dyslipidemia theory of atherogenesis, the role of inflammatory factors is actively discussed.

Objectives: study of leukocyte indices of elderly patients with a stable coronary artery disease.

Materials and methods: The study included 230 elderly patients with a stable ischemic heart disease, without signs of acute inflammatory diseases and without dysfunction of liver and kidneys. For statistical analysis, we used a comparison of the sample values (Student's t-distribution) and the comparison of proportions according to the exact method of Fisher.

Results: The average key-marks in the group were: age of patients — 77.3 ± 8.3 years, leukocytes — $6.8 \pm 1.9 \cdot 10^9 / l$, total cholesterol — 5.44 ± 1.41 mmol / l, low-density lipoprotein cholesterol — 3.23 ± 1.25 mmol / l, high-density lipoprotein cholesterol — 1.42 ± 0.37 mmol / l, atherogenic index — 2.83. The material is represented by average sample deviation as well as standard deviation. The frequencies of chronic heart failure (CHF) and cardiosclerosis diseases are associated with the basic diagnostic criteria. The researched material is divided into three tertiles, subgroups: patients with the high monocyte-lymphocyte ratio, the medium monocyte-lymphocyte ratio and the low one. It was found that a higher frequency of CHF and cardiosclerosis are revealed in the high monocyte-lymphocyte ratio group in comparison to the other groups. Thus, there is a high incidence of cardiosclerosis and CHF in the group with a high monocyte-lymphocyte ratio (MLR) (>0.31), and, on the contrary, in the group with a low MLR, there is a low incidence of cardiosclerosis and CHF. The comparison of a high (>2.34) and a low (<1.56) neutrophil-lymphocyte ratio (NLR) did not reveal any association with the cardiovascular complications in stable course of ischemic heart disease.

Conclusion: The ratio of blood cell populations (leukocyte indices) has a diagnostic value at the moment. The studied indices are obtained by dividing the absolute number of monocytes (MLR) into the lymphocytes and the absolute number of neutrophils (NLR) into the lymphocytes. The monocyte-lymphocytic ratio reveals a relationship with the incidence of cardiosclerosis of chronic heart failure in elderly patients with coronary artery disease. If a larger amount of material is obtained, it would be possible soon to include a monocyte-lymphocytic ratio in the diagnostic plan of patients with coronary artery disease.

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