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ANALYSIS OF THE EFFICIENCY OF HYPOLIPIDEMICAL THERAPY IN PATIENTS WITH CARDIOVASCULAR DISEASES AND METABOLIC DISORDERS

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Introduction. Cardiovascular diseases (CVD) continue to be the most urgent health care problem in most countries of the world. Modification of risk factors, in particular correction of dyslipidemia, reduces the likelihood of complications both among people without signs of the disease and among patients with metabolic disorders. The risk of an acute cardiovascular event caused by atherosclerosis increases rapidly as atherogenic lipoproteins are deposited in the vessel wall and plaque size increases. This proves the need for therapy aimed at reducing the level of atherogenic lipoproteins within both primary and secondary prevention of CVD of atherosclerotic origin. The updated recommendations of the European Society of Cardiology (ESC) and the European Atherosclerosis Society (EAS), 2019 present target levels of atherogenic fractions of the lipidogram, which are also markers of cardiovascular risk (CVR) and factors subject to drug correction. In particular, the correction of the lipid profile involves the use of a therapeutic scheme that ensures a reduction of ≥50% of low-density lipoprotein cholesterol (LDL-C) from the initial value and the achievement of the target level of <1.4 mmol/l/ <1.8 mmol/l for persons with very high/high CVR. Regarding the content of triglycerides (TG), clear target values are not defined, but the parameter <1.7 mmol/l is associated with a lower probability of developing CVR, and a higher value indicates the need to look for other risk factors.

The purpose of the study: to analyze the results of correction of lipid metabolism disorders in patients with cardiovascular pathology and metabolic disorders.

Materials and methods. The medical histories and outpatient records of 45 patients with a mean age of 64.3 (71.2; 58.4) years (25 men and 20 women) with high and very high CVR who were being treated at department of metabolic disorders of the educational and scientific medical complex "University Clinic" of the Kharkiv National Medical University. All patients were prescribed hypolipidemic drugs from

the statin group - atorvastatin or rosuvastatin - to correct dyslipidemia. The patients were divided into groups: 1st group – 10 people with high CVR who used statins in a dose of 10 mg; 2ha – 12 people with high CVR who used statins in a dose of 20 mg; 3tya - 10 people with very high CVR who used statins at a dose of 10 mg and 4ta - 13 people with very high CVR who used statins at a dose of 20 mg. The levels of LDL cholesterol and TG were analyzed before the appointment of treatment and against the background of treatment after 6-12 months).

Statistical data processing was carried out using the capabilities of the dialog system "Statistika 10.0" with the definition of average indicators, median and quartiles (Me 25–75). Statistical reliability was determined at $p \leq 0.05$, trend — at $p < 0.1$.

Results and their discussion. According to the results of the study, in patients with very high CVR who took hypolipidemic drugs in a dose of 10 mg, a probable decrease in the level of LDL cholesterol was noted, which was 2.1 (2.8; 1.7) mmol/l against 2.8 (3, 4;2.6) mmol/l before the start of treatment, $p \leq 0.05$. The use of a certain dose of statins in people with high CVR also led to a decrease in the content of LDL-C, but it was not statistically significant: 1.9 (2.4; 1.6) versus 2.1 (2.3; 1.8) mmol /l, $p=0.18$. Patients treated with rosuvastatin/atorvastatin at a dose of 20 mg showed a significant reduction in LDL-C levels of 1.6 (1.9; 1.4) mmol/l versus 3.8 (4.2; 3.3) mmol/l before baseline treatment in the group of people with high CVR, $p \leq 0.01$. In the group with very high CVR, the values were respectively 2.0 (1.7; 2.4) mmol/l versus 4.2 (4.4; 3.7) mmol/l, $p \leq 0.01$.

The appointment of hypolipidemic therapy led to a statistically significant decrease in TG in all groups of subjects ($p \leq 0.05$), which was: 1.5 (1.8; 2.6) mmol/l versus 2.0 (2.6; 1, 8) in the 1st group, 1.4 (2.1; 0.8) mmol/l against 2.0 (2.2; 1.6) in the 2nd group, 0.8 (1.4; 0.4) mmol/l versus 2.2 (2.6; 1.9) in the 3rd group, 1.6 (1.8; 1.3) mmol/l. It should be noted that during treatment with statins at a dose of 10 mg, even in the presence of a probable decrease in the parameters of the lipid profile, the target values of LDL cholesterol were achieved only by 2 people (20%) in the group of very high CVR. In the group of people with high CVR, this indicator was 10% (1 person).

Conclusion. The obtained data showed the failure reaching target lipid parameter levels in patients with cardiovascular pathology and metabolic disorders taken of low doses

of lipid-lowering drugs. In patients with high and very high cardiovascular risk, more appropriate is the use of statins in a dosage of 20 mg.