

Cholesterolemia in Patients with Hypertension

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Annotation: In this article, we evaluate the most common changes in arterial hypertension and cholesterol among cardiovascular diseases and the changes in the frequency of the disease when the two conditions occur together. Death in economically developed countries of the world today Cardiovascular diseases make up more than 55% of the causes. Among the main cardiovascular diseases leading to severe diseases of the heart, brain and other organs, the first place belongs to hypertension. WHO according to data, 12.8% of deaths in the world are related to hypertension. Carbohydrate metabolism in patients with arterial hypertension There are cases of disruption and disruption of several biochemical indicators. Among them, the change in the amount of cholesterol is a very large percentage. Among the factors that cause the disease, obesity, overweight and dyslipidemia occupy the leading positions. In this regard, among patients with arterial hypertension it is necessary to expand preventive measures in the medical institution aimed at early detection of pathology, formation of risk groups and timely treatment. The decrease in the amount of cholesterol contributes to the improvement of blood circulation in the blood vessels and to a certain extent to the regulation of blood pressure.

Keywords: Cholesterolemia, dyslipidemia, obesity, diabetes mellitus, arterial hypertension, risk factors, metabolism.

Introduction

In modern medicine, it is related to cardiovascular diseases great attention is paid to the study of the problem. Cardiovascular pathology the urgency of the fight against high morbidity, early disability and death depends. Causes of death in economically developed countries of the world today Cardiovascular diseases make up more than 55%. Heart, brain and major cardiovascular disease leading to severe diseases of other organs the first place among diseases belongs to hypertension. According to WHO, 12.8% of deaths in the world are related to hypertension [1,2,5]. The highest prevalence of AH is recorded in developing countries.

According to a number of researchers , the age structure of the prevalence of GB is: people over 50 years old - more than half of the population, people over 60 years old - 60-80%. Awareness that they have AH is 37% in men and 59% in women. At the same time, only 21.6% of men and 46.7% of women take antihypertensive drugs, and the effectiveness of antihypertensive therapy is much lower - 5.7% and 17.5%, respectively.

AH occurrence, development and prognosis mainly with risk factors determined - these are different conditions of the exogenous and endogenous environment. These conditions increase the risk of developing hypertension due to various metabolic diseases and changes in the functioning of internal organs. According to the European guidelines for the treatment of arterial hypertension of the European Society of Hypertension and the European Society of Cardiology (2013), the main risk factors for hypertension are: age, blood pressure, abdominal obesity, early cardiovascular disease family history, smoking, elevated blood glucose and lipid levels. Risk factors that act simultaneously and over a long period of time contributes to the more severe course of the disease and the development of various complications. Eliminating these factors, i.e. modifiable factors, makes it easier to treat .

Thus, the organization of cardiology care in front of the health care system. There are new responsible and urgent tasks to develop and implement a rational form of treatment, in particular, to fight against such a common disease risk factor as AG. Most often, endocrinologists use the classification of pathology developed by Donald Frederickson in 1965. An American researcher identified six forms of the disease based on the cholesterol fraction predominant in the blood plasma of patients: type I - increased concentration of chylomicrons;

type IIa - increase in the level of low-density lipoproteins;

type IIb - increased concentration of low and very low density lipoproteins;

type III - increased concentration of intermediate-density lipoproteins;

type IV - increase in the level of low-density lipoproteins (indicators of very low-density lipoproteins remain normal);

type V - simultaneous increase in the concentration of very low density lipoproteins and chylomicrons. According to the etiology, hypercholesterolemia is divided into two types - primary and secondary. Both forms are diagnosed in patients equally often. The pathology of the primary type is caused by hereditary disorders of lipid metabolism, which manifest themselves under the influence of exogenous factors (unbalanced nutrition, smoking, etc.). The secondary type of hypercholesterolemia becomes a consequence of systemic pathologies and endocrine diseases. The purpose of the study. Study of the prevalence of risk factors with increased cholesterol levels in patients with arterial hypertension.

Materials and methods. 68 people with hypertension aged 20-69 years under observation patients, including 34 men and 34 women. When examining patients include examination, questioning, calculation of body mass index (BMI), total cholesterol, high-density lipoprotein (HDL) and low-density lipoprotein (LDL), and carbohydrate metabolism (glucose tolerance test). According to the recommendations of the International Group on Obesity (1997) excess weight determined by the Quetelet index calculated according to the following formula: $\text{weight (kg)} / \text{height (m)}^2$, ≥ 25 and 4 grades ≥ 30 were obtained for obesity. 3 out of 5 criteria were found in patients with MS: abdominal obesity (waist circumference ≥ 94 cm in men, ≥ 80 cm in women), TG an increase in the level of ≥ 1.7 mmol / L, a decrease in HDL cholesterol < 1.03 in men mmol/L and < 1.29 mmol/L in women, arterial hypertension (SBP ≥ 130 mm Hg or DBP ≥ 85 mm Hg) or antihypertensive for previously diagnosed hypertension therapy; fasting plasma glucose ≥ 5.6 mmol/L or earlier diagnosis established type 2 diabetes. Depending on the initial level of glycemia, all patients are divided into three groups divided. Group I consisted of 30 people with normal glycemia; Group II - 22 people with impaired glucose tolerance (IGT); and group III - 16 people with type II diabetes (DM II).

Results. The analysis of the obtained data showed that with arterial hypertension. Among the patients, 17 people had abnormal cholesterol levels, 22 (32.35%) had impaired glucose tolerance, 16 (23.52%) had type II diabetes, 30 (44.5%)) was determined. 11% normoglycemia

Summary. Thus, obesity, overweight, and dyslipidemia are the most common factors of cholesterol metabolism disorder and carbohydrate metabolism disorder in patients with arterial hypertension. In this regard, among patients with arterial hypertension it is necessary to expand preventive measures in the medical institution aimed at early detection of pathology, formation of risk groups and timely treatment.

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