

Analysis of Risk Factors in Arterial Hypertension

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Annotation: The number of cardiovascular diseases is increasing worldwide, and 1/3 of the deaths were recorded in 2019. The number of deaths increased from 12.1 million in 1990 to 18.6 million in 2019. (American College of Cardiology, 2020) Factors that increase the risk or "risk factors" for cardiovascular disease can be effectively controlled or their effects reversed. The data presented in the article is the result of an anonymous survey of patients diagnosed with arterial hypertension, during which an analysis of the socio-medical significance of the main risk factors in these patients was carried out.

Keywords: risk factors, arterial hypertension, lifestyle

INTRODUCTION

In addition to being the leading cause of death in recent decades, cardiovascular diseases constitute the majority of diseases among adults in all countries of the world. Diseases of the cardiovascular system have a certain medical and social importance in our modern society, which requires early detection and elimination of risk factors. [1]. According to the National Institute of Statistics, diseases of the circulatory system, including hypertension, are one of the leading causes of death - accounting for 67% of

deaths in Bulgaria in 2018. There are differences in the development of the disease in different nations (high arterial hypertension in Finland, moderate hypertension in Germany and Sweden, and mild hypertension in Spain) [2]. Risk factors that increase the likelihood of the disease and affect its development include: excess salt in food, genetic predisposition, overweight, mental stress, alcohol consumption, reduced physical activity, and the patient's age. [6] Effective prevention strategies should focus on maintaining a healthy lifestyle, limiting factors such as smoking, diet and physical activity, obesity, alcohol consumption, and psychosocial stress

Goals and objectives:

The main goal of the study is to determine the main risk factors and their socio-medical significance in patients diagnosed with arterial hypertension.

Materials and methods:

The information listed in the article is the result of an anonymous examination of 100 patients diagnosed with arterial hypertension admitted to the cardiology dispensary of Bukhara region during 2023-2024.

RESULTS ANALYSIS

Data from a survey on dietary and lifestyle risk factors and comorbidities in patients with arterial hypertension include: After conducting a survey among patients, it was found that 64% of the respondents were men and 36% were women. These statistics show that the majority of patients are men. A large number of literary sources emphasize the superiority of men with diseases of the cardiovascular system.

In recent decades, there has been an increase in the incidence of hypertension among young people. In the population between the ages of 18 and 50, hypertension is more common among men, and the percentage of women with hypertension after the age of 50 is higher than that of men. The study shows that the youngest patients with hypertension are in their 20s. The highest percentage of patients in the age range is between 60 and 70 years. The prevalence of arterial hypertension among young people is lower than among adults. Most cardiovascular diseases can be hereditary. High blood pressure is hereditary, 60% of respondents said that their parents had information about cardiovascular diseases, 32% - did not have information about cardiovascular diseases in their family or were not aware of existing ones emphasizes. 8% of respondents have no family history of cardiovascular disease. 34% of the respondents measure their blood pressure regularly, and 66% resort to measuring it only when they have a severe headache, heart palpitations or shortness of breath. High blood pressure damages blood vessels. This, in turn, increases the risk of stroke, kidney failure, heart disease and heart attack.

Hypertension is often called the "hidden killer" because it can exist for years without visible symptoms and without the patient knowing about it. High blood pressure is a major risk factor for the development of serious cardiovascular diseases. 69% of the

examined persons experienced repeated hypertensive crisis. Some of those surveyed reported palpitations, pallor, light-headedness, dizziness, anxiety, and tension before experiencing a hypertensive crisis.

Long-term high blood sugar accelerates the development of atherosclerosis. As a result, all major blood vessels in the body are covered with atherosclerotic plaques. This is most evident in the blood vessels that supply the heart (coronary arteries), brain and lower limbs. The highest rate was 73% of respondents who reported diabetes as their main condition.

Currently, about 190 million people worldwide have diabetes, and in 2025 this number will reach 300 million. The disease exists both in highly industrialized countries and in developing countries. Almost 25% of people over the age of 50 have impaired glucose tolerance, and 5-8% of them develop diabetes per year.

The importance of changes in the diet of patients with high blood pressure has been confirmed by the DASH (Dietary Approach to Stop Hypertension) study [4]. The diet used in this study is rich in fruits, vegetables, and low-fat dairy products. Salt content and total calories are constant. The diet itself is called DASH. People on this diet have significantly lower blood pressure than those on a standard diet. Research shows the benefits of a low-fat diet. It is also useful for reducing the risk of atherosclerosis. People who eat less salt have less high blood pressure as they age. Limiting salt intake to about 100 mmol / 24 hours (5-6 g / 24 hours) leads to a significant decrease in blood pressure.

Excess weight increases the risk of developing serious diseases such as arterial hypertension, atherosclerosis, heart failure, lipid metabolism disorders, and others. To reduce the risk of cardiovascular diseases, it is necessary to improve the functional health of the examined patients. Overweight and obesity are usually measured by body mass index (BMI).

Smoking is the main risk factor for atherosclerotic cardiovascular diseases. This causes an increase in heart rate that lasts 15 minutes after smoking. The risk for smokers is related to the number of cigarettes smoked per day and the length of the smoking period, doubling after 30 years compared to a 10-year smoking period [3]. Smokers have a 30 times higher risk of heart disease than non-smokers. Smoking one or more packs of cigarettes per day doubles the risk of cardiovascular disease. Stopping smoking reduces this risk. The risk of developing cardiovascular diseases in smokers of more than 20 cigarettes per day is 2.5 times higher than in non-smokers, and 3 times higher in smokers. Smoking increases morbidity and mortality from coronary heart disease.

Acute emotional stress can cause an increase in blood pressure due to a sharp increase in serum adrenaline and norepinephrine [5]. Long-term (chronic) stress can cause a constant increase in blood pressure.

Stress is a state of the body caused by unusual, long-term stimulation. As a result, large amounts of stress hormones are released. Stress hormones:

- Increase blood pressure;
- can cause heart attack and other cardiovascular diseases.

In the past year, 46% of respondents experienced stress related to the loss/death of a loved one or divorce, 25% experienced stress from changing jobs, 18% experienced other stressful situations, and 11% experienced a change of location. experienced stress. All this had a serious effect on their health and blood pressure.

Conclusion

The study confirms that among the population between 18 and 50 years of age, hypertension is more common among men, and after the age of 50, the percentage of women with hypertension is higher. According to the results, the youngest patients with hypertension are 20 years old. The highest percentage of patients is between 60 and 70 years old. High blood pressure is hereditary, and most patients have a history of cardiovascular disease in their parents. Hypertension is significantly associated with being overweight, and the risk of developing it has been shown to be 40-60% higher in overweight people. Lifestyle changes are important in the prevention and treatment of cardiovascular disease. To reduce the risk of hypertension, it is necessary to regularly measure blood pressure to lose weight if overweight, stop smoking, limit alcohol consumption and increase physical activity. Reducing the intake of saturated fat and cholesterol from food significantly improves heart function.

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