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GROWING RISKS IN CARDIOLOGY: HYPERTENSION AND ITS PROPHYLAXIS

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Annotation: This article provides an in-depth analysis of hypertension (arterial hypertension) as a growing risk factor in modern cardiology. The epidemiological characteristics, development mechanisms, main risk factors and long-term effects of this disease, which is widespread worldwide, are covered from a scientific perspective. The study examines the pathogenesis, symptoms, diagnostic criteria and modern treatment methods of hypertension, and develops effective strategies for primary, secondary and tertiary prevention. It also emphasizes the importance of a healthy lifestyle, increasing medical literacy among the population and the role of regular screening examinations in preventing cardiovascular diseases. The article analyzes the role of hypertension in the global healthcare system, its complications and comprehensive approaches to their reduction on a scientific basis, and provides practical recommendations.

Keywords: Hypertension, arterial hypertension, cardiovascular diseases, prevention, risk factors, epidemiology, pathogenesis, cardiovascular system, diagnostics, treatment, screening, healthy lifestyle, cardiology, complications.

One of the most important areas of modern medicine is the in-depth study of cardiovascular diseases, the identification of their causative factors and the development of effective preventive measures. The fact that cardiovascular diseases are currently the leading cause of death in the global health system shows how urgent this topic is. According to the World Health Organization (WHO), about 30% of deaths worldwide are associated with heart and vascular diseases, the most common of which is hypertension.

Hypertension or arterial hypertension (AH) is a chronic disease characterized by a constant increase in blood pressure in the arteries above normal, the prevalence of which is increasing every year. The incidence of this disease remains high in both developed and developing countries. This creates a need to study hypertension not only as a medical, but also as a socio-economic problem.

The danger of arterial hypertension is that it often proceeds without obvious symptoms for years. During this process, the vessels of the heart, kidneys, brain and fundus of the eye are gradually damaged. As a result, serious complications such as stroke, myocardial infarction, heart failure and a sharp decrease in vision occur. Therefore, identifying risk factors leading to hypertension, minimizing their impact and improving preventive measures are a priority task in cardiology.

This article provides a comprehensive overview of the mechanisms of development of hypertension, epidemiological features, risk factors, clinical manifestations, diagnostic



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criteria, treatment principles and preventive strategies. It also provides an analysis based on global and local experience, modern scientific research and practical approaches.

Epidemiology of Hypertension

Global Prevalence

According to the latest WHO data, more than 1.28 billion adults worldwide live with hypertension. Of these, 46% are unaware of their condition, and 40% are not receiving regular treatment. This process is closely related to:

- demographic changes,
- urbanization,
- dietary changes,
- sedentary lifestyle

The growth rate of hypertension in developing countries is higher than in developed countries, which is explained by the limited capabilities of the health care system.

In Central Asia, and in particular in Uzbekistan, hypertension has one of the highest rates. According to official statistics, 25-30% of the adult population has high blood pressure. The expansion of the system of regular medical examinations in the country is increasing the possibility of early detection of the disease, but full coverage is still not enough.

Complications of hypertension

- Myocardial infarction
- Stroke
- Heart failure
- Kidney failure
- Retinopathy
- Aortic aneurysm

Each of them poses a serious threat to human life.

Hypertension is one of the most important problems in the field of cardiology today and is one of the leading chronic diseases globally. Its high prevalence, insufficient adherence to the principles of prevention, low medical literacy among the population, and lack of attention to a healthy lifestyle are contributing to the sharp increase in the disease.

The danger of hypertension is that it often goes unnoticed and over the years causes irreversible damage to vital organs such as the heart, brain, and kidneys. Therefore, it is of great importance to strengthen primary prevention of the disease, establish regular medical examinations, early identification of individuals at high risk of hypertension, and improve treatment strategies.

A healthy lifestyle — proper nutrition, physical activity, stress management, and giving up harmful habits — is one of the most effective and economically feasible measures to prevent the disease. Comprehensive screening of the population in the primary health care system can significantly reduce the incidence of complications associated with hypertension.



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In conclusion, hypertension is not just a medical issue, but a global social problem, and its effective management requires the cooperation of all stakeholders — doctors, society, the health care system, and citizens. A comprehensive prevention approach, modern treatment standards, and measures to improve public health will be important factors in reducing the spread of the disease in the future.

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