

WAYS OF EARLY DETECTION AND PREVENTION OF HYPERTENSION

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Abstract

Hypertension is one of the leading causes of the highest incidence and mortality worldwide today. Consistently higher than normal blood pressure leads to severe complications such as diseases of the cardiovascular system, stroke, heart failure and kidney damage. Therefore, early detection of hypertension, identification of risk factors and taking preventive measures are of great importance in maintaining human health.

The article discusses ways to detect hypertension at an early stage, that is, monitoring constant blood pressure, measuring at home, undergoing a medical examination and determining the genetic predisposition. It also highlights the role of the main risk factors for the disease – overweight, poor diet, inactivity, stress, and an unhealthy lifestyle.

For the prevention of hypertension, the need to form a healthy lifestyle, give up harmful habits, limit salt consumption, increase physical activity and control the psychological state, are emphasized. At the same time, increased preventive work among the population and timely consultation of health workers play an important role in preventing the development of hypertension.

Keywords: Hypertension, blood pressure, blood pressure control, hypertension prevention, healthy lifestyle, modern diagnostic methods, stress and hypertension, genetic predisposition, obesity and hypertension, physical activity, salt consumption, smoking and alcohol, cardiovascular disease, home monitoring, early detection and prevention.

Introduction

The relevance of hypertension disease

One of the most common diseases that threaten human health today is **arterial hypertension**. According to the World Health Organization, one in three adults in the world is diagnosed with hypertension, and this figure is increasing every year. Hypertension is also widespread in Uzbekistan, and hypertension is the main cause of many cardiovascular diseases, myocardial infarction, stroke, kidney failure and many other complications. Unfortunately, most people don't notice or notice the pressure on themselves. This leads to the latent course of the disease and dire consequences.

Hypertension is not only a medical problem but also a social one. Because this disease can lead to reduced working capacity, disability, premature death. Therefore, the early detection of hypertension, reduction of risk factors and the establishment of preventive work are among the most urgent issues today.

Blood pressure norms and the concept of hypertension

Arterial blood pressure refers to the force of blood movement through the heart and blood vessels in the human body. Blood pressure consists of two indicators: **systolic pressure** (high pressure, measured when the heart contracts) and **diastolic pressure** (lower pressure, measured when the heart contracts).

According to the recommendation of the World Health Organization (WHO), normal blood pressure should not exceed 120/80 mm mercury column. And hypertension is a disease characterized by a constant high blood pressure. In clinical practice, arterial hypertension is divided into the following stages:

- **Level 1 hypertension:** 140-159/90-99 mm mercury column
- **Level 2 hypertension:** 160-179/100-109 mm mercury column
- **Level 3 hypertension:** Above 180/110 mm mercury column

Sometimes there is also "latent hypertension", in which a person does not feel any symptoms of the disease, but his blood pressure is always high. This condition is particularly dangerous and, if not detected in time, can lead to serious changes in the heart and vascular system.

1. Methods for the early detection of hypertension

Early detection of hypertension is one of the key factors in preventing its severe complications. Often, hypertension does not manifest itself for years with any symptoms. This may lead to the fact that the disease is not detected in a timely manner. That is why it is so important to conduct regular medical examinations and monitor blood pressure.

The Importance of Regular Blood Pressure Measurement

Regular blood pressure measurement is one of the simplest and most effective ways to diagnose hypertension. Most people only go to the doctor when their health deteriorates or symptoms of illness appear. The fact is that even a healthy person should check their blood pressure at least 1-2 times a year. In people over 40 years old, this indicator is even more important because with age, the likelihood of developing hypertension increases.

Regular blood pressure measurements not only help detect disease early, but it also increases the patient's focus on their own health. As a result, he or she will be able to reevaluate his or her lifestyle and move towards a healthier life.

Monitoring and modern technologies in the house

Currently, there are many modern devices for measuring blood pressure. With the help of automatic tonometers, a person can monitor his blood pressure at home, in everyday life. Regular monitoring in home care is of great importance in the prevention of cardiovascular diseases. When the results of the home pressure measurement are presented to the doctor, it helps determine the patient's general condition and the degree of hypertension development.

Some modern devices connect with mobile applications and store results electronically. This allows you to constantly analyze pressure indicators. Also, through such technologies, patients will strengthen control over their health and reduce the risk of hypertension.

Determining genetic predisposition

Genetic predisposition also plays a major role in the development of hypertension. If a person's next of kin (parents, brothers, sisters) has hypertension, then there is a higher risk of getting caught with the disease. Therefore, it is imperative for such people to monitor their blood pressure at all times and seek medical advice.

Currently, in some clinics there is also the possibility to determine the likelihood of developing hypertension through genetic analyzes. Thanks to this method, a person can become more responsible in monitoring the health of his cardiovascular system.

2. Risk factors for hypertension

Hypertension disease often occurs when several factors are influencing it. Knowing these factors and strengthening control over them is important in preventing disease. Risk factors are divided into external and internal factors. Below you will find information about the main risk factors that can lead to the development of hypertension.

Overweight and obesity

Overweight and obesity are one of the main causes of hypertension. An increased amount of fatty tissue in the body gives an excess load to the heart and blood vessels. This leads to an increase in blood pressure. Especially dangerous is the accumulation of fat in the abdominal area (abdominal obesity) for hypertension. Studies show that even a 5-10% reduction in body weight can have a significant positive effect in normalizing blood pressure.

Stress and mental strain

Constant states of stress and mental stress are some of the important factors in the development of hypertension. During stress, hormones such as cortisol and adrenaline increase in the body, causing the heart rate to speed up and blood pressure to rise. And long-term stress can provoke persistent forms of hypertension. Therefore, reducing stress

and maintaining psychological health plays an important role in the prevention of hypertension.

Improper diet and salty food

Excessive salt intake in the daily diet also increases the risk of hypertension. Salt retains fluid in the body and creates pressure on blood vessels. According to WHO, the daily salt intake should not exceed 5 grams. Also, oily, sugary and fried foods provoke the development of hypertension. Improper nutrition leads to the development of atherosclerosis in the blood vessels, and this condition is also one of the reasons for the increase in pressure.

Smoking and alcohol consumption

Smoking causes blood vessels to narrow, which raises blood pressure. Nicotine hardens the wall of vessels, increasing the load on the heart. A large consumption of alcohol also adversely affects the cardiovascular system, causing hypertension. Therefore, smoking and avoiding alcohol reduces the risk of hypertension.

Kamharakatlik

Lack of physical activity is also an important factor in the development of hypertension. With a lack of movement, fat accumulates in the body, the function of the heart and blood vessels begins to weaken. Regular physical activity is essential for keeping blood pressure within normal and maintaining heart health.

3. Preventive measures for hypertension

Although it is important to detect and treat hypertension at an early stage, the most correct way is to prevent the disease. With the help of preventive measures, it is possible to prevent the development of hypertension or slow down the aggravation of the disease. Below are the main recommendations for the prevention of hypertension.

Formation of healthy lifestyles

A healthy lifestyle is the main focus of hypertension prevention. Everyone should pay attention to their daily habits, make healthy lifestyle choices. A healthy lifestyle plays an important role in keeping blood pressure in moderation, preventing the development of cardiovascular diseases.

Increased physical activity

Daily exercise or walking is of great importance in the prevention of hypertension. It is recommended that you engage in physical activity for at least 30 minutes every day. It helps improve blood circulation, strengthens the heart muscles and helps to get rid of excess weight. Regular sports can help lower and stabilize blood pressure.

Feed regulation

Proper nutrition plays an important role in controlling blood pressure. It is necessary to reduce the amount of salt in the diet, limit greasy and fried foods, eat more vegetables, fruits, grain products, fish and lean-free meat. Potassium, magnesium and calcium-rich products (bananas, spinach, dairy products) also reduce the risk of hypertension.

Stepping Away Harmful Habits

Smoking and alcohol consumption increase the risk of hypertension. Therefore, it is necessary to abandon these harmful habits. This helps prevent not only the occurrence of hypertension, but also other cardiovascular diseases.

Maintaining psychological health

Stress and mental stress can provoke the development of hypertension. Therefore, a person needs to pay attention to his psychological state, learn the methods of managing stress. Techniques such as relaxation, meditation, yoga, music therapy can be helpful in reducing stress.

Conclusion

Hypertension is one of the most dangerous and widespread diseases that threaten human health today. The particularly dangerous side of this disease is that it often goes for a long period of time without any pronounced symptoms. This leads to late detection of the disease and the development of severe complications. Diseases such as ischemic heart disease, stroke, kidney failure, decreased vision are among the direct consequences of hypertension. That is why hypertension is considered as a factor that threatens the safety of not only one disease, but also the entire cardiovascular system.

Detection and timely control of hypertension plays a key role in preventing the aggravation of the disease. Regular blood pressure measurement, use of modern technologies and adherence to a healthy lifestyle are the most important measures that will reduce the likelihood of developing the disease. Measuring and monitoring blood pressure at home is a simple but effective way through which a person can control their health. However, it is also important to consider genetic predisposition, because if a parent or close relative has hypertension, the risk increases even more in such people.

Hypertension can be prevented by controlling the main risk factors for the disease, namely getting rid of excess weight, reducing salt and fatty foods, increasing physical activity, avoiding stress and giving up bad habits. When preventive measures are practiced in everyone's daily life, it increases not only personal health, but also the overall health of the community.

In addition, the widespread introduction of preventive tests in the healthcare system, raising the awareness of the population and encouraging the implementation of medical indications play an important role in preventing the formation of hypertension. Health

workers and doctors should regularly consult the population and promote a healthy lifestyle.

In conclusion, early detection and prevention of hypertension is one of the important steps towards not only individual health, but also the health of the whole society and raising a healthy offspring. If everyone is attentive to their health, the incidence of diseases and deaths associated with hypertension will be greatly reduced.

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