## RESEARCH OF NON-PHARMACEUTICAL ARTERIAL PRESSURE CORRECTION METHODS AND THE PREVENTION OF HYPERTENSION Podkolzina M.V., Kurylenko Yu.Ye.

National University of Pharmacy, Kharkiv, Ukraine, economica@nuph.edu.ua

Hypertension (hypertension) is a leading risk factor for cardiovascular disease of varying severity. According to the Institute of Cardiology. M.D. Strazhesko and the Institute of Therapy of the AMS of Ukraine in 2010, approximately 1 billion people worldwide have suffered from hypertension, and this figure is steadily increasing - by 2025, it is expected to be 1.56 billion patients. hypertension control in the European countries is quite low and is 5-10%, only 25-32% of patients with this disease are treated. In the United States, the situation is much better: about 54% of patients with hypertension are treated there, and they reach target blood pressure levels of about 64%. In the US, 32% of adults suffer from hypertension.

The situation in our country looks a little worse: the prevalence of hypertension among the adult population of Ukraine is 36%, men are more likely to get sick. The structure is dominated by mild hypertension (50% of patients), the proportion of patients with moderate hypertension is about 30%, severe - 17% of patients with hypertension. Control of hypertension in Ukraine is 14% in the urban population and only 8% in the rural population, which makes the situation worse with the treatment of this dangerous disease and the importance of prevention. Considering these data, the aim of our study was reearch of non-drug methods of correction of blood pressure.

Considering that pharmacy workers advise visitors not only on the correct use, storage of drugs, as well as lifestyle, health measures, carry out sanitary and educational activities, it is appropriate to investigate preventive measures and available methods of non-drug correction of blood pressure at an early stage hypertension.

Non-drug antihypertensive therapy. At the initial stage and in the mild hypertension form, only non-pharmacological treatments / zero degree. These methods are aimed at improving the lifestyle, reducing excess body weight, limiting salt intake and correcting hyperlipidemia. Wellness practices include smoking cessation, alcohol abuse, strong tea and coffee. It is desirable for the patient with hypertension to provide full rest, sufficient night sleep.

Body weight of a patient with hypertension should approach the ideal regardless of the age of the person, it can be determined using the following formulas:

- a) body weight = height in cm -100,
- b) body weight = height in cm x perimeter of the chest in cm / 240.

A direct correlation between body weight and blood pressure level was established. A 15% reduction in body weight in obesity leads to a 10% decrease in blood pressure. Weight loss is achieved through restriction and exercise regimen. Patients with hypertension at a young age should recommend metered exercise with a gradual increase in either walking or light jogging or swimming. It is more difficult with the elderly, who often have hypertension combined with various comorbidities. They should follow a low-calorie diet. It is not rational to carry out complete therapeutic starvation with mild hypertension (hypertension). A more stable decrease

in blood pressure occurs with a gradual decrease in body weight by limiting the caloric content of food.

One of the major risk factors for hypertension is the consumption of excess salt. Increasing its content in food causes the body's tendency to hypertensive reactions. Reduced sodium intake with food while increasing potassium-rich foods leads to a significant decrease in systolic and diastolic blood pressure with stable hypertension. A more pronounced antihypertensive effect is observed in the hyperrenal form of hypertension.

Often, with stable hypertension, only limiting the salt allows you to give up pharmacological agents. The daily dose of salt in patients with hypertension should be within 4-6 g. However, sodium should be carefully restricted in elderly patients who are prone to hyponatremia.

In the emergence and progression of hypertension, a certain importance belongs to psycho-emotional overloads, stresses that provoke catecholamine hyperproduction, hyperlipidemia and vascular neurosis. That is why it is important to teach the patient to respond correctly to various complex life and interpersonal relationships. Elimination of psychotraumatic factors promotes even recovery at an early stage of illness. Along with psychotherapy, acupuncture and autogenous training, the patient's ability to adapt to the micro-social environment plays an important role.

Another important component of non-drug antihypertensive therapy is the diet with the restriction of animal fats. Quite often, hypertension is combined with hyperlipidemia, which contributes to the progression of the disease and the development of coronary heart disease. By the way, the normalization of lipid metabolism is hypotensive.

Food should reduce animal fat to 25-30% of total calories. With the inclusion of fat dairy products, the amount of animal fat should not exceed 40 g per day. Foods that are rich in polyunsaturated fatty acids should be included in food. It is advisable for the patient with hypertension to use two tablespoons of vegetable oil a day. Non-pharmacological treatments include wellness exercise, balneological and physiotherapy treatments. It is advisable to use sanatoriums and spa treatment more widely.

If within 3-6 months of non-drug antihypertensive therapy there is no decrease in blood pressure up to 140/90 mm Hg, then it is advisable to switch to drug treatment. In some cases, after the first examination, the patient positively resolves the issue of prescribing medication. The patient's desire to change or not to change the lifestyle is also taken into account.

Scientists from the National Institute of Heart, Lungs and Blood in the United States have found the perfect diet that will help you lose weight. Experts called the best nutrition device "a dietary approach to the treatment of hypertension". Scientists say that the best diet in the world is able to stabilize blood pressure in the human body. In addition, the system will reduce the level of cholesterol in the blood and restore normal functioning of the gastrointestinal tract. Experts also believe that a "dietary approach to the treatment of hypertension" will help to heal the entire human body.

**Nutrition Recommendations:** 

- More potassium and magnesium. The source of these substances are bananas, baked potatoes, dried apricots and fresh apricots, buckwheat porridge.
- Viburnum, normalizes pressure. If Viburnum tea becomes your daily drink, the chances of normalizing the pressure will be quite high.

Much damage to the human body when improper preparation is caused by mutton and waterfowl. When used, sharply increases the amount of "bad" cholesterol, which causes atherosclerotic lesions of blood vessels:

- We exclude caffeine. Coffee and strong tea are drinks that should give up hypertension, or limit their use as much as possible. The fact is that caffeine constricts blood vessels, rather than provoking an increase in pressure.
- Restrict alcohol. Alcohol abuse also leads to increased blood pressure. Allowable alcohol is -50 g of cognac and 150-200 g of wine.
- Eat vegetables and fruits daily. These products contain many vitamins and trace elements that improve cardiovascular function.
- Are you overweight? Reduce your calorie intake. Obese people are more likely to be hypertensive. To reduce the risk of hypertension, bring your weight to normal.
- Follow the diet. There are twice a day large portions it is unacceptable in hypertension. It is necessary to take food at least 4-5 times a day in small portions. This will protect your body from overloading when digesting a large amount of food that can provoke upward pressure.

Non-pharmacological methods do not lose their value at all stages of hypertension and should not be discontinued. Physical methods of treatment of hypertension include the appointment of mustard, hot gentle baths, cold on the head. In some cases, to eliminate the phenomena of cardiac asthma use bloodletting of 300-500 ml. Such treatment is shown for patients of young and middle age. Elderly patients with marked cerebral atherosclerosis are prescribed medical leeches for mastoid raimed of 2-4 leeches on each side.

The reason for the hypertension are psycho-emotional overvoltages with the failure of adaptation mechanisms, meteorological factors, hormonal disorders. In old and old age, sudden elevation of blood pressure may be triggered by acute cerebral ischemia due to cerebral atherosclerosis, cervical osteochondrosis, or chronic circulatory cerebral insufficiency. Hypertension may cause acute myocardial ischemia with CNS reflex excitation and sudden catecholamine release into the bloodstream. Therefore, when carrying out preventive measures it is necessary to take into account the mechanism of development of the hypertension, adjust the rhythm of life.

Conclusion. Primary prevention of hypertension is important in terms of maintaining human health. It is aimed at improving the health of the population by adhering to a healthy lifestyle, maintaining a healthy diet and exercise. The main components of prevention include: normalization of body weight with calorie restriction of food, nutrition with restriction of salt intake, exercise in hypodynamia, possibly eliminating stress. At the same time, doctors say it is important for the recovery of moderate loads of low and medium intensity, as heavy loads and powerful aerobic exercise can trigger heart failure five worsen the patient's health.