

inflammatory stimulus, therefore a detailed study of the life history with regard to ENT features is an important component of high-quality diagnosis and a guarantee of rational treatment of cardiovascular diseases.

THE EFFECTIVENESS OF DIHYDROPYRIDINE CALCIUM CHANNELS BLOCKER AMLODIPINE FOR THE COMBINATION TREATMENT OF PATIENTS WITH ARTERIAL HYPERTENSION AND METABOLIC SYNDROME

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Relevance of the work. Metabolic syndrome (MS) is a cluster of risk factors in the cardiovascular continuum, with the main role of the insulin resistance (IR) in the sequence of its development, which is, according to WHO experts, is a pandemic of the 21st century.

The drugs of choice in the complex treatment of arterial hypertension (AH) and MS should have a high antihypertensive potential, the ability to improve glucose metabolism, not worsen tissue IR, normalize the blood lipid spectrum, and limit the effect of neurohumoral factors on the cardiovascular system.

The unique properties of amlodipine are the ability to inhibit the proliferation of vascular smooth muscle cells, which underlies the antisclerotic effect of the drug, and a powerful antioxidant activity, which contributes to the inhibition of myocyte apoptosis in HF. There is evidence that the drug has antiaggregatory and antithrombotic effects.

Purpose of the work. To study the efficacy and safety of amlodipine in the complex treatment of arterial hypertension in patients with MS.

Research materials and methods. We examined 30 patients with AH with MS (4 - men, 26 - women), mean age - 62.3 ± 5.8 years. All patients was suffering of AH grade 1-2 against the background of compensated type 2 Diabetes Mellitus (DM) (15 patients) or insulin resistance (15 patients) in combination with dyslipidemia and overweight (10 patients) or obesity grade 1-2 (20 patients). The duration of DM ranged from 1 to 10 years (average 2.6 ± 1.4 years). AH was diagnosed simultaneously with DM or preceded it (mean disease duration 3.5 ± 1.2 years). We prescribed amlodipine together with ACE inhibitor at an initial daily dose of 5 mg. The effectiveness of the combination treatment was evaluated 1, 2 and 3 weeks after the start of therapy. In the inadequate response to therapy the dose of amlodipine was increased to 7.5-10 mg/day. The safety of the treatment was assessed by the level of fasting and stimulated glycemia and lipid profile indicators.

Results. A decrease in SBP and DBP was noted in all patients, the effectiveness of a starting dose of 5 mg was confirmed in 12 patients (grade 1 AH), 7.5-10 mg in 14 patients. In 4 patients, the target level of BP was not achieved, antihypertensive therapy was combined with thiazide diuretic (patients with stage II

hypertension and a long history of type 2 DM). The glycemic profile had tendency to improvement in 7 patients (RI and glucose intolerance decreased), in patients with DM, the effectiveness of hypoglycemic therapy increased. Necessity of increase the doses of hypoglycemic drugs was not occurred. During the three-week observation, there was a tendency to reduce the dyslipidemia (unreliable decrease in the level of TG and LDL). Microalbuminuria also decreased by average $17\pm 3.2\%$. Adverse reactions were noted in 5 patients: peripheral edema - in 2, a feeling of heat ("hot flashes") - in 2, a feeling of rapid heartbeat - in 1, headache - in 1 patient. Their severity was insignificant and did not require discontinuation of the treatment. Clinically, there was an improvement in the general condition of patients, increase tolerance to physical activity. All patients were discharged with improvement and recommendations to continue the use of complex treatment with amlodipine at the individually adjusted dose under BP control.

Conclusion. Thus, the use of amlodipine in the complex treatment of AH in patients with MS at a dose of 5-10 mg is effective and safe for the glycemic and lipid profile of patients.

The use of amlodipine contributes to the effective decrease in SBP, DBP, the level of microalbuminuria by improving the function of the glomeruli of renal nephrons, favorably affects the levels of glycemia and lipidemia, reduces blood plasma atherogenicity, does not have a stimulating effect on sympathetic activity, improves the quality of life of the patient, helping to reduce coronary risk.

THE IMPACT OF STRESS ON THE CARDIOVASCULAR SYSTEM OF THE HUMAN BODY

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Every day a person is exposed to stressful factors that directly affect both his emotional and physical health.

Stress is a nonspecific reaction of the body to the suprathreshold effect of a stimulus, as well as the response of our nervous system. Conventionally, it can be divided into good - eustress, bad - distress, and short-term and chronic stress.

As for the short-term, it is believed that it has positive effects on the body, namely, it increases resistance to irritants, trains the nervous system, and helps to bear negative emotions more easily, allows concentration and mobilization of forces. Chronic stress has a detrimental effect on the body, affecting both one and several organ systems. One of the most sensitive to the influence of a stress factor is the cardiovascular system, which contributes to the further development of such diseases as arrhythmias, atherosclerosis, coronary heart disease, myocardial infarction, and others.