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## **PROBLEMS IN THE TREATMENT OF HYPERTENSION AND METHODS OF THEIR ELIMINATION**

*Resume:* Despite the successes achieved in the treatment of arterial hypertension (AH), adequate control of blood pressure (BP) in the population is far from ideal. The lecture describes the four degrees of risk of cardiovascular complications caused by hypertension. Modern standards of drug and non-drug antihypertensive therapy are considered in detail. The target blood pressure levels that are recommended to be achieved in the treatment of patients with hypertension, in accordance with existing international recommendations, are given. The indications for the use of rational combined antihypertensive therapy are analyzed. Recommendations are given on the individual selection of drugs, depending on concomitant diseases.

*Key words:* arterial hypertension, antihypertensive drugs, risk factors.

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## **ПРОБЛЕМЫ В ЛЕЧЕНИИ АРТЕРИАЛЬНОЙ ГИПЕРТЕНЗИИ И МЕТОДЫ ИХ УСТРАНЕНИЯ**

*Резюме:* Несмотря на достигнутые успехи в лечении артериальной гипертензии (АГ), адекватный контроль артериального давления (АД) в популяции далек от идеального. В лекции дается характеристика четырех степеней риска сердечно-сосудистых осложнений, вызванных АГ. Подробно рассмотрены современные стандарты медикаментозной и

немедикаментозной гипотензивной терапии. Приведены целевые уровни АД, которые рекомендуется достигнуть при лечении больных АГ, в соответствии с существующими международными рекомендациями. Разбираются показания к использованию рациональной комбинированной антигипертензивной терапии. Даются рекомендации по индивидуальному подбору препаратов, в зависимости от сопутствующих заболеваний.

**Ключевые слова:** артериальная гипертония, антигипертензивные препараты, факторы риска.

**Relevance.** Despite the successes achieved in the treatment of arterial hypertension (AH), adequate control of blood pressure (BP) in the population is far from ideal[2,5]. The lecture describes four degrees of risk of cardiovascular complications caused by hypertension [1,3]. Modern standards of drug and non-drug antihypertensive therapy are considered in detail. The target blood pressure levels that are recommended to be achieved in the treatment of patients with hypertension, in accordance with existing international recommendations, are given. The indications for the use of rational combined antihypertensive therapy are analyzed.

**The purpose of the study.** The goal of antihypertensive therapy is to achieve the target blood pressure. The main goal of treating a patient with hypertension is to minimize the overall cardiovascular risk. To achieve this goal, it is necessary to correct all modifiable risk factors, treat associated clinical conditions, as well as treat the actual hypertension syndrome, that is, antihypertensive therapy.

**Material and methods of research.** The study included 80 patients with stage II-III hypertension, 2-3 degrees of hypertension aged 40 to 60 years, who did not reach the target blood pressure level while taking two AGPS for 6 months at maximum therapeutic doses in combination with three or more cardiovascular risk factors and 20 conditionally healthy individuals (group

control) to clarify the standards of the studied indicators. All patients signed an informed voluntary consent to participate in the study.

**The results of the study.** Patients with symptomatic hypertension, acute myocardial infarction or stroke (less than 6 months), congestive heart failure, severe persistent rhythm and conduction disorders, severe concomitant somatic, neurological and oncological pathology were excluded from the study.

The patients included in the study revealed pronounced violations of the daily profile of blood pressure, multiple lesions of target organs, endothelial dysfunction, dysmetabolic changes that make it difficult to adequately control blood pressure and make it possible to include this category of patients in the category of patients with "difficult-to-control arterial hypertension". The revealed correlations between the main indicators of the metabolic profile, peripheral hemodynamics, endothelial function, structural and functional indicators of the left ventricle state the relationship and interdependence of pathogenetic mechanisms underlying difficult-to-control hypertension.

Long-term use of candesartan in combination with hydrochlorothiazide and lercanidipine contributes to achieving the target blood pressure level in 88% of patients, with predominantly positive dynamics for average daily indicators and variability of blood pressure, and therapy with moxonidine in combination with hydrochlorothiazide and lercanidipine - in 82% of patients, with the achievement of normative values for mean blood pressure indicators and the index of temporary hypertension.

A significant decrease in the mass of the left ventricular myocardium is achieved by the third month of therapy on the background of candesartan therapy with hydrochlorothiazide and lercanidipine and by the 6th month - on the background of moxonidine therapy with hydrochlorothiazide and lercanidipine. Improvement of diastolic function is noted from the 3rd month of therapy with treatment with both combinations. Candesartan therapy in

combination with hydrochlorothiazide and lercanidipine modifies concentric left ventricular myocardial hypertrophy into eccentric in 13.5% of patients.

Three-component antihypertensive treatment regimens for hypertension with the inclusion of lercanidipine have a corrective effect on impaired cerebral, renal hemodynamics, endothelial function already at the early stages of treatment - after 3 months, however, a more pronounced positive dynamics was noted when it was combined with candesartan and hydrochlorothiazide during long-term therapy.

Both three—component antihypertensive therapy regimens have a corrective effect on the impaired lipid profile, hyperuricemia is eliminated after 3 months on the background of candesartan therapy in combination with hydrochlorothiazide and lercanidipine, and postprandial glycemia is eliminated on therapy with moxonidine.

**Conclusion.** Thus, the main changes in the recommendation for the diagnosis and treatment of hypertension in 2018 are as follows:

New target values of blood pressure, less conservative treatment of (very) elderly people;

Changing the schemes of rational combined pharmacotherapy;

The need to identify low commitment and apply a set of measures aimed at increasing it.

At the same time, new methods of diagnosis and treatment of metabolic disorders are being developed, which are detected at early stages or precede an increase in blood pressure. Currently, it has been shown that such groups of drugs as ACE inhibitors, ARBs, BMCC, selective imidazoline receptor agonists have advantages in patients with metabolic syndrome as a means of treatment and prevention of the development of cardiovascular complications.

#### **LIST OF LITERATURE:**

1. Leonova M.V., Belousov Yu.B. et al. Analysis of pharmacotherapy of arterial hypertension according to the results of the PYTHAGORAS III study // Pharmateca. 2010. No. 3. pp. 87-95.

2. Bangalore S., Kumar S., Lobach I., Messerli F. H. Target blood pressure indicators in patients with type 2 diabetes mellitus/fasting glucose level disorder: observations from traditional and Bayesian meta-analyses of randomized trials. *Circulation* 2011; 123 (24): 2799-2810.

3. Hodgkinson J., Mant J., Martin W. et al. Relative effectiveness of blood pressure monitoring in the clinic and at home compared with outpatient blood pressure monitoring in the diagnosis of hypertension: systematic review. *BMJ* 2011; 342:d3621.

4. National Collaborating Center for Chronic Diseases. Arterial hypertension: Treatment of arterial hypertension in adults in primary health care: Partial update. *GOOD Clinical Guidance*. London, UK: Royal College of Physicians. 2010.

5. Vitkovsky A., Preibish A., Florchak E. et al. The effect of sympathetic kidney denervation on blood pressure, sleep apnea and glycemic control in patients with resistant hypertension and sleep apnea. *Hypertension* 2011; 58 (4): 559-565.