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ГОЛОВНА МІСІЯ, НАПРЯМИ
ТА ІНСТРУМЕНТИ, ШЛЯХ І
ЇЇ РОЗВИТОК**

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PATIENTS WITH RESISTANT ARTERIAL HYPERTENSION: OPTIONS OF THE DAILY BLOOD PRESSURE PROFILE


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Cardiovascular diseases remain the main cause of mortality in the world. Arterial hypertension (AH) is the cause of death in about 9 million people per year. According to experts' forecasts, the prevalence of this pathology will increase in the future due to the aging of the population. Even a small increase in blood pressure represents a significant health risk [1], [2].

Uncontrolled hypertension accelerates the damage of target organs and leads to irreversible changes on their part and, as a result, the development of cardiovascular disasters. Early detection of hypertension and effective control of blood pressure reduces the risk of cardiovascular complications. It should be emphasized that increased blood pressure is a more significant risk factor for stroke than myocardial infarction. Thus, 60% of complications from the cardiovascular system are observed in patients with a moderate increase in blood pressure. With high blood pressure, the risk of coronary heart disease increases 3-4 times, and the risk of stroke increases 7 times [3], [4].



Despite the comprehensive coverage in the specialized literature of the management tactics of patients with hypertension and a large selection of modern antihypertensive drugs, there remains a fairly large number of patients with resistant arterial hypertension in the general population. Resistant arterial hypertension (RAH) is a form of arterial hypertension that creates a high cardiovascular risk for the patient due to a constant increase in blood pressure and damage to target organs. It should be clearly understood that uncontrolled hypertension is not synonymous with RAH. The first includes insufficient blood pressure control due to low adherence of patients to treatment or an inadequate therapy regimen. There is also the concept of pseudoresistance - a condition that is most often caused by an incorrect blood pressure measurement technique or low patient compliance [5], [6].

Among patients who are admitted to RAH based on office pressure, up to a third have controlled blood pressure according to DBPM data. This is probably due to the so-called "white coat" effect. The technology of daily blood pressure monitoring (DBPM) allows you to objectify the value of blood pressure (BP) within 24 hours. It is not only an important tool in the diagnosis and follow-up of patients with hypertension, but also a valuable method for evaluating patients with RAH. The DBPM data allow us to compare groups of patients with hypertension who are seen by a family doctor in everyday life, and whose blood pressure is controlled with antihypertensive drugs, with patients who have RAH. According to studies, the cohort of patients with RAH has a worse circadian BP profile, as well as sharp differences between office and ambulatory blood pressure [7], [8].

The purpose of the study: to determine the types of daily profile of blood pressure in patients with resistant arterial hypertension.

Materials and methods. In order to carry out the study, a comprehensive examination was conducted in outpatient conditions at the Center of Primary Health Care No. 9, Zaporizhzhia, 117 patients (median age was 60.0 [57.0 ; 24.0] years) with a previous diagnosis RAH, for the comparison group, 71 patients (median age was 60.0 [56.0; 63.0] years) with stage II hypertension were examined.

Criteria for inclusion in the study: male and female patients from 45 to 65 years old; RAH was detected; the history of stage II hypertension is known for at least 6 months; consent of patients for observation.

Exclusion criteria from the study: atrioventricular block II-III degree; congenital or acquired hemodynamically significant heart defects; secondary hypertension; oncological diseases; alcohol addiction, drug addiction, presence of mental disorders.

Daily blood pressure monitoring was carried out using the "Cardiosens-AT" complex (Ukraine). Recorded on the BP monitor with further processing in tabular and graphic forms. Monitoring was carried out for 24 hours with a 15-minute interval during the day and a 30-minute interval during the night. Based on the data on the degree of nocturnal decrease in blood pressure, the following types of daily blood pressure curves are distinguished: - "Dipper" - patients with a normal decrease in blood pressure at night (CI is 10-20%); "Non-Dipper" - patients with insufficient nocturnal lowering of BP (CI less than 10%); "Over-Dipper" - patients with an excessive drop in blood pressure at night (CI exceeds 20-22%); "Night-Peaker" - patients with paradoxical nocturnal hypertension; nocturnal blood pressure values are higher than daytime values and SI values are less than 0%.

The statistical processing of the results was carried out on a personal computer using the PSPP application program package (version 1.2.0, GNU project, 1998-2018, GNU GPL license). When testing statistical hypotheses, the null hypothesis was rejected at a level of statistical significance (p) below 0.05.

Obtained results. The types of daily blood pressure curves in the group of RAH patients were as follows: "Dipper" was detected in 34 (29.1%) patients, "Non-Dipper" - 50 (42.7%), "Over-Dipper" - 15 (12, 8 %) and "Night-Peaker" - 18 (15.5 %). In the group of patients with GC II stage, the types of daily blood pressure curves were as follows: "Dipper" was detected in 43 (60.6%) patients, "Non-Dipper" - 5 (7.0%), "Over-Dipper" - 20 (28.2%) and "Night-Peaker" - 3 (4.2%). Comparison of proportions of types of daily blood pressure curves was performed using the χ^2 -criterion. In all the above-described types, a significant difference between groups of patients was found ($p < 0.05$). It was found that in the group of patients with RAH, the "Non-Dipper" profile prevailed, 42.7%, while in the group of patients with GC II stage, there were more people who had the "Dipper" profile of the daily blood pressure curve - 60.6%.

Thus, in the group of patients with RAH, there were significantly more people who had violations of the diurnal BP curve type. It is appropriate to routinely use DBPM in the initial evaluation of all patients with RAH. For a significant number of these patients, DBPM will also be an important tool in follow-up, especially regarding the possible effects of all therapeutic maneuvers aimed at bringing blood pressure into target ranges.

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ПАЦІЄНТИ ЗІ СТІЙКОЮ АРТЕРІАЛЬНОЮ ГІПЕРТЕНЗІЄЮ: ВАРІАНТИ ДОБОВОГО ПРОФІЛЮ АРТЕРІАЛЬНОГО ТИСКУ

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