

HEMODYNAMIC PROFILE OF HYPERTENSIVE PATIENTS WITH LABILE BLOOD PRESSURE

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Objective. The aim of study was to investigate clinical characteristics of hypertensive patients with labile blood pressure (BP) in comparison with patients having stable elevation of BP.

Design and methods. 92 patients with arterial hypertension (AH) were enrolled in the study. There were 55 females and 37 males. Mean age of the examined patients was 51.2 ± 9.1 years. The fasting plasma concentration of lipids was determined by immunoassay. Cardiac remodeling and peculiarities of hemodynamics were assessed by echocardiography and 24-hours BP monitoring (withdrawal of antihypertensive medications was made at the day of investigation). The detection of hypotensive episodes during 24-hours BP monitoring were used as criterion of labile arterial hypertension (LAH). Data are presented as mean $\pm$ standard deviation.

Results. There were 26 patients with LAH and 66 patients with stable arterial hypertension (SAH). The daily systolic blood pressure (SBP), daily diastolic blood pressure (DBP) were lower in patients with LAH than with SAH (125.9 ± 12.5 vs. 137.2 ± 14.2 mm Hg, $p < 0.001$; 77.8 ± 8.3 vs. 86.3 ± 8.6 mm Hg; $p < 0.001$). Daily variability of SBP and DBP in contrast was higher in patients with LAH than with SAH (17.1 ± 3.9 vs. 14.4 ± 3.2 , $p < 0.001$; 12.9 ± 2.7 vs. 11.1 ± 1.8 , $p < 0.001$). Daily variability of heart rate was also higher in patients with LAH (13.0 ± 3.6 vs. 10.9 ± 3.0 , $p = 0.005$). Myocardial mass index by Penn Convention formula was less in patients with LAH than with SAH (124.0 ± 19.9 vs. 140.3 ± 30.8 g/m², $p = 0.014$). The plasma level of triglycerides was higher in patients with LAH than with SAH (2.56 ± 1.74 vs. 1.76 ± 1.01 mmol/l, $p = 0.007$).

Conclusions. Labile arterial hypertension is associated with mild elevation of blood pressure, mild increase of myocardial mass, high variability of blood pressure and heart rate. Hypertriglyceridemia found in patients with labile blood pressure may indicate early metabolic abnormality, which are common in arterial hypertension.