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**CHANGES OF THE END DIASTOLIC SIZE OF A MYOCARDIUM OF THE
LEFT VENTRICLE ACCORDING TO AN ECHOCARDIOGRAPHY IN
PATIENTS WITH HYPERTENSION IN COMBINATION WITH OBESITY
DEPENDING ON IRISIN LEVEL**

Introduction: At this stage of development of medical science remain insufficiently studied a question on development and progressing of cardiohemodinamskal violations at the connection of the hypertension and obesity. An important question in the direction of forecasting of these pathologies is studying of metabolic active agents, such as adipocytes which in their turn secret irisin and influence thus a condition of a myocardium of the left ventricle (LV).

Aim: to estimate changes of the end diastolic size of a myocardium of the left ventricle according to an echocardiography in patients with hypertension in combination with obesity depending on irisin level.

Materials and methods. 105 patients among whom there were 56 women (53.33%) and 49 men (46.67%) participated in a research. All patients were distributed on 2 groups: 1 group was made by patients with hypertension with the accompanying obesity (n = 70), the 2nd group - by patients with hypertension with normal body weight (n = 35). Average age of patients in the 1st group was $66,43 \pm 1,26$ years, and in the 2nd group - $65,18 \pm 1,42$ years. The control group was made by 25 almost healthy people among which there were 16 women (64%) and 9 men (36%). Average age in control group was $59,7 \pm 3,27$ years. An irisin level was determined to all participants of a research using a test system of firm irisin ELISA KIT (China) on the immunofermental analyzer "Labline- 90" (Austria). There were conducted general clinical and instrumental examinations to all patients. Echocardiographic researches was conducted by a standard technique Feygenbaum X. on the ultrasonic device RADMIR (Ultima PRO 30) (Kharkiv, Ukraine). In the M-mode the end diastolic size (EDS) (cm) of LV was defined. For assessment of the degree of relationship between developments coefficient of correlation (r) was used.

Results: For irisin role assessment in EDS LV changes patients with hypertension and obesity were distributed on subgroups depending on irisinemia: 1 subgroup - $<1.19 \pm 0.03$ ng/ml (n = 31), the 2nd subgroup - $> 1.19 \pm 0.03$ ng/ml (n = 39).

In patients of 1 and 2 subgroups EDS was $7,28 \pm 0,06$ cm and $4,11 \pm 0,07$ cm respectively. EDS was 43.54% lower in patients of 2 subgroups in comparison with 1 subgroup (p <0.05). Correlation analysis revealed the reliable return relationship of irisin with EDS (r = - 0.36, p <0.05).

Conclusions: Reduction of irisin level in blood serum leads to increase in the end diastolic size of a myocardium of the left ventricle.

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INDIVIDUALIZED ANTIOXIDANT THERAPY INCREASES EFFECTIVENESS OF THE BASIS ISCHEMIC HEART DISEASE TREATMENT

Purpose: to increase the safety and effectiveness of ischemic heart disease (IHD) pharmacological treatment.

Materials and methods: the mentioned clinical study covered 71 patients of Kharkiv Regional Centre of Radiological Protection at the age of 65.3 ± 6.4 (61 males and 20 females). The SCORE rate was used to assess the cardiovascular risk and showed that majority of the patients $n=(47.5 \pm 2.4\%)$ belonged to the high cardiovascular risk group (5-9%), $n=(28.5 \pm 1.5\%)$ – to moderate cardiovascular risk (up to 4%), $n=19.7 \pm 1.9\%$ - to the very high cardiovascular risk. Control group was formed of 20 clinically healthy individuals. Individual selection of antioxidant medications was performed by detection of the blood serum total antioxidant activity (bromatometric titration method) and lactate and pyruvate content (by spectrophotometry). The evaluation of clinical effectiveness was carried out by physical examination, electrocardiography and treadmill test.

The patients were divided into groups in order with the variant of pharmacotherapy: 1) basis stable angina therapy (antiagregants, beta-blockers or ACE-inhibitors, statins and