**DEPENDENCE OF ANTHROPOMETRIC AND HEMODYNAMIC PARAMETERS ON THE INTERLEUKIN-22 LEVEL IN PATIENTS WITH ARTERIAL HYPERTENSION**

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Arterial hypertension (AH) is one of the most pressing medical and social issues of the modern world.

Literature data indicate a relationship between hypertension and inflammatory process, which is exacerbated by the presence of overweight. Recently, the role of cytokines in the pathogenesis of hypertension and metabolic disorders has been actively studied.

In 2000, a group of researchers discovered a new interleukin-22 (IL-22) molecule, a pro-inflammatory cytokine, which showed a pro-hypertensive effect in a mouse model. However, data on the involvement of IL-22 in the pathogenesis of obesity and hypertension in humans are contradictory and require further study.

The aim of our study was to study anthropometric and hemodynamic parameters in patients with arterial hypertension, depending on the level of interleukin-22.

Materials and methods. 81 patients with hypertension were examined (32 men and 49 women). All patients underwent a detailed clinical, anthropometric, and laboratory examination. Determination of IL-22 level in the blood plasma was carried out by ELISA. Statistical analysis of the data was performed using nonparametric statistics. The null hypothesis was rejected at a confidence level (p <0.05).

Results and discussion. In order to study the anthropometric and hemodynamic parameters in patients with hypertension, depending on the level of IL-22, all the examined patients were equally divided into tertiles depending on the of fasting IL-22 serum levels.

Comparing the levels of hemodynamic parameters (SAP, DAP, PAD, and the duration of hypertension), it was found that their levels significantly increased in parallel with the increase of IL-22 level in the serum of patients with hypertension (p <0.05). Comparison of anthropometric indicators found that the higher the IL-22 level, the greater is the body weight and such parameters as BMI, waist circumference, tight circumference, waist circumference/tight circumference (p <0.05).

Correlation analysis revealed a strong direct reliable relationship between IL-22 level and body weight (R = 0.64; p <0.05), BMI (R = 0.76; p <0.05), waist circumference (R = 0.48; p <0.05) and waist circumference/tight circumference index (R = 0.56; p <0.05).

Findings. Our results, namely, a significant increase in hemodynamic parameters, respectively, an increase of IL-22 level in the serum of patients with hypertension, may indicate that this cytokine has a pro-hypertensive effect. Our results also support the fact that IL-22 plays a significant role in the development of metabolic disorders and obesity.