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[PP.24.262] THE RELATIONSHIP OF CARDIOVASCULAR RISK FACTORS IN OBESE HYPERTENSIVE PATIENTS WITH DIFFERENT DEGREES OF HYPERTENSION

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The aim: to determine the characteristics of the relationship between indicators lipidotransport's system and carbohydrate metabolism depending on the degree of hypertension. Materials and

Methods: 102 obese hypertensive patients on average age 54.9 ± 9.94 matched in age and sex were examined. All patients underwent clinical examination, assessment of carbohydrate and lipids metabolism and determine the level of apolipoproteins (apo B and apo A1). According to the criteria of the IDF (2005) was diagnosed abdominal obesity (AO). The patients were divided into 3 groups according to the degree of hypertension.

Results: In obese patients with 1 degree detected of the highest level of fasting hyperinsulinemia (19.96 ± 7.08 uU/mL) and HOMA-IR (4.91 ± 2.41), which is associated with AO in many patients (80%) of this group. In patients with 1 degree revealed the relationship of anthropometric and metabolic parameters: a negative significant correlation between WC and the level of apo A1 ($R = -0.72, p < 0.01$) and BMI is negatively correlated with apo A1 ($R = -0.75, p < 0.01$) and positively with apo B ($R = 0.85, p < 0.001$). And also postprandial glycemia (6.18 ± 0.99 mmol/l), insulinemia (48.14 ± 20.45 uU/mL) and HOMA-IR (13.83 ± 8.27) were higher in obese hypertensive patients with 3 degree. As well revealed a positive significant relationship between the waist circumference (WC) and DBP ($R = 0.33, p < 0.03$), insulinemia ($P = 0.36, p < 0.02$). In individuals with 1 degree SBP was associated with very low-density lipoprotein cholesterol (VLDL-C) ($R = 0.87; p < 0.003$), and triglycerides (TG) ($R = 0.76; p < 0.009$), but with 2 degree DBP was associated with glycaemia ($R = 0.30; p < 0.02$) and total cholesterol (TC) ($R = 0.28; p < 0.04$). In obese hypertensive patients with 2 degree revealed an association between levels of apo B and TC ($R = 0.43; p < 0.001$), low-density lipoprotein cholesterol (LDL-C) ($R = 0.42; p < 0.001$), and TG ($R = 0.41; p < 0.002$). At the same time apo A1 is negative associated with TC ($R = -0.29; p < 0.03$), and LDL-C ($R = -0.35; p < 0.008$). In patients with 3 degree revealed the relationship between levels of apo B and TC ($R = 0.44; p < 0.004$), LDL-C ($R = 0.43; p < 0.005$), VLDL-C ($R = 0.44; p < 0.004$), and TG ($R = 0.38; p < 0.01$), and negative association with levels of apo A1 and TC ($R = -0.32; p < 0.04$) and apo B ($R = -0.57; p < 0.001$).

Conclusion: This study showed that the hemodynamic factors, along with insulin resistance and postprandial dismetabolism promote the formation of atherogenic potential, as evidenced by the relationship between the basic and additional atherogenic markers in obese hypertensive patients according to the degree of hypertension.

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