Material. The study involved 158 patients (94 men and 52 women) with hypertension of I-II stage, 1-2 degree with DM II (n=105) and obesity (n=53).

Results. The best response to telmisartan after 6 weeks was observed in patients with ProPro/AA genotype: -21,1% decrease in SBP and -16,7% in DBP. Smaller efficacy was observed in ProPro/AC+CC group: -17,6% and -11,9% accordingly. The minimal response to therapy was shown by XAla/AC+CC carriers: -10,0% and 4,1%. Over the next 6 weeks 17 patients (mostly XAla/AC+CC carriers) additionally received hydrochlorothiazide. Speaking of ACE gene I/D polymorphism, ramipril showed the best efficasy in group of II genotype ($p < 0,01$): monotherapy allowed to achieve target blood pressure in 83,3% patients, the average dose of ramipril was $4,2 \pm 0,5$ mg daily. In DD genotype carriers, these figures were 57,2% and $4,6 \pm 0,4$ mg/day. Indapamide caused the best effect in D allele carriers: the target blood pressure on monotherapy was achieved in 90,4% cases on the average daily dose of $2,26 \pm 0,11$ mg, against 40,0% and 2,5 mg in II genotype group, respectively.

Conclusion. The best sensitivity to treatment with telmisartan was shown by ProPro homozygotes, the presence of Ala-allele and C-allele of AT1R gene was associated with decreased response. HAla /AC+CC seem to be the most unfavorable combination of genes in terms of telmisartan effectiveness in patients with hypertension and DM II. In hypertensive patients with obesity the best response to treatment with ramipril was observed in patients with II genotype of ACE gene, and in DD carriers with indapamide.

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THE CARBOHYDRATE METABOLISM IN HYPERTENSIVE PATIENTS DEPENDING ON LEPTIN LEVEL

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Aim. The aim of our study was investigate the parameters of carbohydrate metabolism in serum depend on leptin level in hypertensive patients.

Material and methods. 123 hypertensive patients were examined. The levels of leptin and insulin by ELISA were determined. The index of insulin resistance (HOMA index) was calculated by the formula. HOMA index > 2.77 considered to be insulin resistance.

Results. Patients were divided into three groups depend on fasting leptin blood level: 1st group (n=41) - the level of leptin was 2.24 - 7.18 ng/ml; 2nd group (n=41) - the level of leptin was 7.21 ó 12.50 ng/ml; 3rd (n=41) - the level of leptin was 12.50 ó 67.25 ng/ml. It was found, that the parameters of blood pressure (BP), body mass index, waist circumference increased parallel to the increasing of level of leptin in blood (<0.05). The parameters of carbohydrate metabolism also increased: in 1st group the level of insulin and HOMA index was (10.52 ± 1.94 mkgU/ml and 2.31 ± 0.59), 2nd group - (12.51 ± 1.20 mkgU/ml and 2.64 ± 0.28), 3rd group - (24.68 ± 2.97 mkgU/ml and 5.51 ± 0.71 cu), <0.05.

Conclusion. It was detected elevated BP, anthropometric data and parameters of carbohydrate metabolism parallel to increasing of leptin level that confirms the impact of leptin on the synthesis of insulin and cellular receptors of insulin.

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SERUM LEPTIN AND HEPATIC FAT CONTENT IN NONDIABETIC PATIENTS WITH NONALCOHOLIC FATTY LIVER DISEASE
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Introduction. Nonalcoholic fatty liver disease (NAFLD) is the most common cause of chronic liver injury in patients who have not consumed alcohol in amounts sufficient to be considered to be harmful to the liver.

Aim. This study was undertaken to assess the relationship between serum leptin and the degree of ectopic fat accumulation, hepatic fat accumulation a tool for the quantification of hepatic triglycerides as a continuous variable in humans.

Material and methods. The hepatic fat (HF) content, measured quantitatively by means of computer tomography, serum leptin, biochemical and hormonal metabolic correlates of NAFLD, insulin resistance (IR) were assessed in 42 affected patients, and 19 individuals with comparable anthropometric features but with normal HF content served as controls. Normal or higher than normal HF content was set at 5% wet weight (ww) as suggested by the American Association for the Study of Liver Diseases. A history of hepatic disease, substance abuse, or daily consumption of more than 20 g/d alcohol or the equivalent in beer and wine were exclusion criteria. IR was estimated using the computer homeostatic model assessment (HOMA-IR).

Results. Anthropometric features of study groups were not different. Individuals with excessive HF content had higher SBP and serum triglycerides and lower HDL-cholesterol than controls. In patients with NAFLD the HF content ($12,1\pm 7,8$ *vs.* $2\pm1\%$ wet weight; $P= 0.0001$) was increased in comparison with the controls. Patients with NAFLD had lower insulin sensitivity (HOMA-IR insulin sensitivity: 57 ± 25 *vs.* $68\pm 27\%$; $P=0.02$), serum leptin (11.3 ± 6.8 *vs.* 13.1 ± 8.4 ng/ml; $P=0.02$) concentrations. Serum leptin was inversely correlated with the HF content ($r =-0.39$; $P= 0.003$) but not HOMA-IR insulin sensitivity.

Conclusion. This study demonstrates that excessive ectopic fat accumulation in the liver NAFLD subjects is associated with lower serum leptin concentration and not with hyperleptinemia.

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ERYTHROPOIETIN ACTIVITY IN CHRONIC HEART FAILURE PATIENTS WITH ANEMIA
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Introduction. Chronic heart failure (CHF) is common and, despite significant therapeutic advances, its prognosis remains poor and comparable with that of many malignant cancers. Recently, much interest has focused on anemia in CHF: