upward trend was observed when comparing the levels of leptin: 1 group (9.84±0.56 ng/ml in men-7.03±0.79 ng/ml for women – 12.03±2.64 ng/ml); 2 group (10.30±0.79 ng/ml in men–7.32±0.77 ng/ml for women-11.52±0.99 ng/ml); 3 group (12/74 ± 0.80 ng / ml in men – 11.94 ± 1.37 ng/ml for women – 13.30 ±0.96 ng / ml) ($p < 0.05$ between 3 group and 1, 2 groups

Conclusion. It was found that the increase of adipocytokines in the blood of patients with arterial hypertension increases alongside the increase of insulin levels, which confirms the influence of TNF-alpha and leptin on the development of hyperinsulinemia in hypertensive patients with high body mass.

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OSTEOPOROSIS - AS ONE OF THE UNFAVORABLE PROGNOSTIC FACTORS OF DIABETES MELITUS

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The problem of osteoporosis (OP) on the background of a global "epidemic" of diabetes mellitus (DM) is of particular interest. The mechanism of developing osteoporosis in DM complicated. But, it is clear that the cause of it is insulin deficiency,which may lead to violation of bone formation and loosing calcium salts.

Aim: To examine the state of bone mineral density (BMD) in patients with type 1 DM according to ultrasound densitometry by evaluating Z-score.

Materials and methods. The study involved 32 patients with DM type 1, among which 19 people (study group) had complications as a diabetic microangiopathy of varying severity. The average age for the group was 32.4 ± 5.2 years. Manifestation of diabetes occurred: from 10 to 15 years - in 7 patients (21.8%); from 16 to 20 years - 14 (43.8%) and after 20 years - 11 patients (34.4%).

Results and discussion. In 5 patients of the main group Z-score were recorded in the range from -1.3 to -1.9 SD (average -1.6 ± 0.08), which corresponds to the development of osteopenia syndrome (OS). In the remaining patients Z-score was significantly lower, that considered by us as development (OP). In all patients with frequent development of sub- or decompensation states revealed signs of OP. In patients with OS noted relatively favorable disease course and a short anamnesis of DM. Study showed that Z-score had a direct correlation with the duration of the disease (r=0.67). More pronounced changes were in patients with onset in childhood and adolescence, which is considered by us as logical process, due to the time of peak bone. Conclusions. In patients with DM type 1, despite the young age of the subjects and almost absence complaints from the skeletal system, to detect changes in BMD of varying severity. Possible development of low reversible disruption of bone tissue in DM needs to solve the issue of early diagnostic of this pathology and find optimal treatments.

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DIAGNOSTIC AND PROGNOSTIC SIGNIFICANCE OF GENE FDPS POLYMORPHISM IN YOUNG ADULTS WITH OSTEOARTHRITIS AND OBESITY

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Osteoarthritis (OA) is considered as a degenerative joint disease that is caused by age, mechanical stress, inflammation, hormonal changes and genetic predisposition. OA is the

most common nosological forms of rheumatic disease (70-80%), makes a major cause of disability and disability population and tends to increase, given the global trend towards an aging population. The leading role in the pathogenesis of OA belongs cell activation by inflammation that leads to increased destruction of cartilage matrix synthesis and reduction. Growth factors and cytokines affect chondrocytes through signaling pathways that regulate the synthesis of matrix metaloproteinaz, whose activity is genetically conditioned and dependent on the expression of genes coding and genetic polymorphisms.

Often the background in favor of OA disease of obesity (OB) – a component of the metabolic syndrome, which causes the severity of many diseases that determine the duration and quality of life, mortality and disability population.

The aim of the study was to determine the diagnostic and prognostic value of gene polymorphism farnezildyfosfatsyntetazy (FDPS) in perebizi OA in young adults with overweight or obesity.

Materials and methods. The study involved 57 patients with OA, which in 32 cases proceeded against the background of obesity 1 (11) or 2nd (21) degree. The age of patients ranged from 27 to 43 years, dominated by men (59.4%). Duration history of OA averaged 6,3±2,4 years. A comparison group – 25 people with isolated OA course - was identical for these indicators study group. 50 healthy individuals were included in the control group. We studied the genetic structure gene polymorphism FDPS. Determining the structure of this gene allows us to estimate the activity of osteoclasts that destroy bone tissue during rearrangements reduce the rate of bone metabolism and affects the mineralization of bone. The paper used diagnostic test kits «SNP-Express ACE Alu Ins / Del (NPF" Lyteh ").

Results and discussion. Our study showed that one of the possible prerequisites of OA in patients with obesity gene polymorphism is a change FDPS, which is characterized by the presence of allele C. Thus, in the control group a number of phenotypic FDPS gene was as follows: genotype A/A was exposed to 34 patients (68%), genotype A / S – 12 patients (24%) and abnormal genotype C/C – 4 people (8%). In patients with isolated OA distribution of genotypes was 11 (44%) 9 (36%) and 5 (20%) – respectively. At the same time in the study group patients phenotypic correlation FDPS gene characterized by the following changes: genotype A/A were 8 patients (25%), genotype A/C – 14 patients (43,7%) and abnormal genotype C/C – 10 people (31,3%). That is, patients with OA and in combination with its more than OB control defined pathological genotype C/C gene FDPS (2,5 and 3.9 times, respectively), while more expressed changes found in patients with more severe disease course and lesions more than 2-3 joints. Hence, these results allow predicting the formation of this disease and the severity of its course.

Conclusions. Patients with OA combined with how often and OB are carriers of abnormal genotype C/C and A/C polymorphism of the gene is associated with the severity and multiplicity of involvement in the pathological process of joints in young people. Defining these indicators allows to predict the course of OA in young patients with overweight and OB, which further helps identify factors unfavorable course of the aforementioned diseases and develop preventive methods monitoring of patients.

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MECHANISMS FOR THE DEVELOPMENT OF OSTEOPENIA IN ELDERLY PATIENTS WITH PRIMARY GOUT

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Aim - to study osteopenic mechanisms in elderly patients with primary gout.