Introduction. Diabet Melitus is a complex and heterogeneous sindrom caused by an innate or acquired disorder of insulin secretion or resistance of peripheral tissues to the insulin produced, it produces profound disturbances in carbohydrate, protein and mineral metabolism. All these leads to the appearance of cronic complications it has become one of the most common metabolic disease .In the world there are 449,3 mln people with diabetes. In the Republic of Moldova there are 90.000 people with diabetes. Studying the role of the: hyperglicaemia final glycation products, inflammation, oxidative stress, the rennin angiotensin aldosterone system, could serve as information markers involved in the production of late complications of diabet mellitus.
Aim of the study. In these review, I will describe the pathogenetic factors involved in the production of late complications of diabet mellitus.
Materials and methods. The material was searched using the PubMed engine along with the psycarticles database. The following keywords joined the search for titles/ abstracts via PubMed: Pathogenesis of late complications of diabet mellitus.
Results. Hyperglycaemia is the basis for chronic lesions in diabet mellitus. In hyperglycemia the body is trying to metabolize glucose in an accelerated way, to decrease the amount of glucose in the same time is formed a series of intermediate toxic products which lead to training advanced glycation end products(AGE). The most important pathological effect of AGE is that many cells have surface receptors for AGE called (RAGE), by binding AGE to receptors(RAGE) are stimulated the inflammation and oxidative stress. The inflammation is involved, the source which produce the inflammation is the adipos tissue trough adipocytes and macrophages which releases pro-inflamatory mediators. TNF alfa, IL-6,IL-1,IL-8, gamma interferon increase the inflammation and aggravate insulin resistance also induces the apoptosis and disfunction of beta pancreatic cells. The oxidative stress means excessive formation of free radicals: reactive oxygen molecules(ROS) and reactive nitrogen molecules(RNS) they alter the structure of proteins, lipids and nucleic acids all leading to vascular damage. ANG II it's an vasoconstrictor factor involved in vascular remodeling and atherosclerosis. Aldosterone has the effect of stimulating proliferation of fibroblasts and stimulating the inflammation.
Conclusions. The control of pathogenetic factors will allow development of pathogenetic therapy of Diabetes and only then we will be able to stopped the occurrence of late complications of diabetes.
Key words: late complications, inflammation

244. PATHOGENETIC FACTORS INVOLVED IN METABOLIC INFLAMMATION INDUCED BY OBESITY

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Introduction. Obesity is a complex problem, multifactorial disorder, characterized by the increase in body weight due to adipose tissue. In recent decades, it has become one of the most common nutritional diseases in the world, being considered the 21st century disease. Its increasing incidence requires attention due to the associated mortality and morbidity potential. Obesity is the most important risk factor for atherosclerosis, hypertension, dyslipidemia, diabetes, being a constituent part of the metabolic syndrome. Studying the role of ghrelin, leptin, adiponectin, TNF could serve as information markers of obesity and other metabolic disorders, organ and obesity-related disorders.
Aim of the study. In this review, I will evaluate and systematize the pathogenetic factors originating from the adipose tissue involved in the metabolic disorder.

Materials and methods. The information was searched using the PubMed engine along with the PsycArticles database. The following keywords joined the search for titles / abstracts via PubMed: Pathogenesis of obesity, leptin, metabolic syndrome, metabolic inflammation.
Results. Adipose tissue produces a series of cytokines collectively called adipocytokine. TNF-alfa - was the first cytokine identified in the adipose tissue in obese mice, marking the beginning of the concept of metabolic inflammation. A series of clinical and experimental studies have been reported showing that adiponectin functions as an anti-atherogenic, anti-inflammatory and antidiabetic agent. Hypoadiponectinemia increases the risk of type II diabetes, hypertension and dyslipidemia and ultimately causes atherosclerosis. Leptin has pro-inflammatory effects by stimulating IL-2 synthesis and by inhibiting the synthesis of IL-4 by T cells. Proinflammatory cytokines induce the synthesis and release of leptin, which helps maintain chronic inflammation in obesity.
Conclusions. The regulation of adipocytokine and brain-intestinal hormone levels will allow the development of methods of prophylaxis and pathogenetic therapy of obesity, metabolic disorders and multiple organ dysfunction-induced obesity.
Key words: pathogenesis of obesity, adipocytokine, metabolic inflammation

DEPARTMENT OF HUMAN PHYSIOLOGY

245. THE CONCEPT OF "RESPIRATORY PERSONALITY" IN TWINS

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Introduction. The first who introduced the term "respiratory personality" was Dejours (1961). He discovered differences in the respiratory pattern from one person to another and suggested that the respiratory pattern may be a stable feature of personality.
Aim of the study. To study the concept of "respiratory personality" in twins
Materials and methods. The group was made of 16 twins (8 pairs) in the age of 24+-6(the youngest are 18 years old, the eldest 30). All don't have respiratory pathology, are healthy and didn't take psychoactive substances before the experiment. The current study was applied in 2 steps. First determines psychometric properties of twins, which were described using PID-5 test. This test has 220 autoreport elements, evaluated from 0 to 3. This test discovers maladaptive personality traits from DSM-5. Second step was made to record respiratory pattern using respiratory inductive pletismography Visuresp RBI France and Capnography Capnostream. The experimental protocol included recording the respiratory variables in 27 minutes: 5 minutes in rest, 3 minutes of pain, 3 minutes postpain rest, 1 minute stress,3 minutes poststress rest, duration of apnea, 3 min postapnea rest, 3 minutes of metronome guided volunteer hyperventilation, 5 minutes of rest.
Results. (1) For all the girls in a pair of twins, the PID-5 domains are more pronounced in one girl than in the second in pair. (2) In a pair of twins, the same domains of PID-5 are often found. The most common is the domain of Disinhibition (6 pairs) and Detachment (7 pairs). (3) Two pairs are similar in all domains. And they are girls. (4) EtCO2 is initially the same in a pair of twins. At 37.5% it starts to differ in the sample with apnea (5) 75% had the same length of apnea (6) 75% had a similar level of pain (7) 62.5% of couples showed the same trend in the change in respiratory rate during the following samples: in transfer from post-pain to stress samples and in transfer from stress to post-stress samples. (8) the same length of apnea are represented in twins with the same Disinhibition domain