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## АКТУАЛЬНІ ПИТАННЯ ТЕРЕТИЧНОЇ ТА ПРАКТИЧНОЇ МЕДИЦИНИ

# Topical Issues of Clinical and Theoretical Medicine

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#### FEATURES OF ACUTE RESPIRATORY VIRAL INFECTIONS IN PATIENTS WITH CONGENITAL SYNDROME OF IMMUNE-ENDOCRINE FAILURE

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Congenital syndrome of immune-endocrine insufficiency (CSIEI) is the type of constitution that is morphologically characterized by primary hyperplasia of the thymus, generalized hyperplasia of lymphoid tissue, adrenal hypoplasia in combination with various anomalies of cardiovascular, and less frequently of urogenital systems. Features of CSIEI in a functional sense are the failure of infectious and immune violations of adaptation under stress.

Endocrine failure, which occurs in patients with CSIEI, usually go unnoticed in the outpatient setting and in the ICU appears addisonian crisis with hypovolemia and shock, which are resistant to treatment.

Objective: to develop criteria for lifetime diagnosis and prevention CSIEI.

The observation came to the intensive care unit of the Regional Clinical Infectious Hospital in Kharkov on the fourth day of illness in very serious condition with a diagnosis of influenza. The patient died in 2 hours after admission despite emergency aid. We studied clinical and anamnesis, results of additional methods of examination and autopsy of thymus, lymph nodes, adrenal glands, spleen, liver and so on. It was conducted by microscopic examination of histological material (hematoxylin and eosin staining).

Conclusions. Acute respiratory viral infection on the background CSIEI is a malignant course of the development of serious complications, resistant to the therapy and a higher risk of fatal outcome.

Considering the consequences CSIEI there is a need for active clinical examination of such persons and assigning them to a particular risk for them immunodeficiency states adrenal insufficiency.

#### THE MAIN ASPECTS OF METABOLISM FOR PATIENTS WITH OSTEOCHONDROSIS, ARTERIAL HYPERTENSION AND TYPE 2 DIABETES MELLITUS

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Importance. Abdominal obesity (AO) is the component of metabolic syndrome. The accumulation of fat cells stimulates the excessive load of lumbar vertebrae. The high level of uric acid (UA) in blood is the significant predictor of complications for patients with cardiovascular diseases. Furthermore, the coexistence with arterial hypertension (AH) has a significant impact of the poor prognosis for patients with diabetes mellitus (DM).

Objective. The objective of our research is the determination of metabolic aspects for patients with osteochondrosis (OH).

Participants and methods. We obtained 82 patients with type 2 DM and AH during our clinical trial. They were treated in Sumy City Clinical Hospital № 1 during 2015 year. Participants were divided in two groups according to the development of OH. People from the first (I) group had it. It's symptoms was absent in the second (II) group. In addition, 10 persons are obtained in control (III) group. We use this biochemical method for determination the level of UA, profile of lipids. All data were analyzed with the help of statistical methods (Excel 2007). In addition, we evaluated the Student criteria (t) and the veracity of differences (p) for assessment results.

Results. The atherogenic index (AI) was higher for patients with OH. The mean levels of AI were  $(5,5\pm0,07)$ ,  $(4,9\pm0,22)$ ,  $(2,5\pm0,32)$  for participants from the I,II, III groups respectively. The mean levels of UA were (430+0,22) mmol/l, (404 +0,33) mmol/l, (250+0,22) mmol/l respectively. Among persons from the I group twelve patient had overweight, four patients had the second stage of obesity and four men had the third stage of obesity. The first stage of obesity was diagnosed for the 50 % of persons and the second stage of it is presented also for the 50 % of participants from the II group. There was no connection between stage of obesity, OH and the levels of UA.

Conclusions. In our clinical trial we determined the absence of interrelation between stage of obesity, stage of OH and the levels of UA. Even primary changes of metabolism stimulate the appearance and development the symptoms of OH. The higher levels of UA, AI, stage of obesity we determined for patients with OH.

## HYPERURICEMIA AS CARDIOVASCULAR RISK FACTOR IN PATIENTS WITH HYPOTHYROIDISM

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Thyroid dysfunction is associated with dyslipidemia, a well-known cardiovascular risk factor. Besides dyslipidemia, thyroid dysfunction can induce insulin resistance, hypertension, endothelial dysfunction.

*Study objectives*: to determine prevalence of hyperuricemia and association with lipid profile in patients with hypothyroidism.

*Methods*: The study included 58 patients with hypothyroidism and a control group of 20 healthy euthyroid volunteers. The following measurements were made in all participants: thyroid-stimulating hormone (TSH), free thyroxin (FT4) concentration, thyroid peroxidase antibodies, total cholesterol (TC), low-density lipoprotein (LDL) cholesterol, high-density lipoprotein (HDL) cholesterol, triglycerides (TG), uric acid. The  $1^{st}$  group included 47 patients with hypothyroidism and normal serum uric acid level, the  $II^{nd}$  group -11 hypothyroid patients with hyperuricemia. Hypothyroidism was defined as a TSH > 4.0 mU/L with a decreased free  $T_4$  level, hyperuricemia – serum uric acid > 420 µmol/l for men and > 360 µmol/l for women.

*Results*: The mean age of patients was 66.3±3.25 years. Prevalence of hyperuricemia in hypothyroidism is 18,9%.

Patients from the  $1^{st}$  group had total cholesterol (5.4±0.77) mmol/l, LDL-cholesterol (3.5±0.45) mmol/l, triglycerides (2.0±0.28) mmol/l.

Hyperuricemia in hypothyroid patients from the  $2^{nd}$  group is accompanied by more elevated total cholesterol concentrations (6.7±0.83) mmol/l (p<0.05), LDL cholesterol (4.3±0.63) mmol/l (p<0.05), triglyceride (2.4±0.32 mmol/l).

*Conclusion*: In case of hyperuricemia patients with hypothyroidism have more pronounced changes in atherogenic lipid profile that require special attention in practical medicine.

## ATHEROSCLEROSIS PROGRESSION FOR PATIENTS WITH TYPE 2 DIABETES MELLITUS AND DYSLIPIDEMIA

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The main cause of death for patients with diabetes mellitus (DM) in Europe is connected with cardiovascular diseases. There is the correlation between them and hyperglycemia.

Aim. To diagnose atherosclerosis in early stages, to develop measures for prevention its progression for patients with type 2 DM and dyslipidemia.

Materials. Study involved 61 patients with type 2DM. They were divided into 2 groups. Group 1 (30) - (22 – with defragment intima and media thickening, 8 – with formed atherosclerotic plaques without changes of vessel diameter), group 2 (31) – with qualitative changes of intima media complex (IMC) (19 people - defragmentation intima and media thickening, 12 – with atherosclerotic plaques without changes the diameter of the vessel). Combined therapy included 20 mg of atorvastatin. The clinical picture was confirmed by the level of HbA1c <7%. For determination the features of atherosclerosis we used complex clinical, laboratory and instrumental methods, including daily monitoring of blood glucose; definition of glycated hemoglobin