glucose tolerance disorders (OR = 2,42, 95% CI [1,13-5,17]) with NASH and comorbid obesity and osteoarthritis was significantly higher than for NASH without OA (p<0,05).

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METABOLIC SYNDROME IN RHEUMATOID ARTHRITIS PATIENTS

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The prevalence of metabolic syndrome (MS) among rheumatoid arthritis patients is 37%, which almost corresponds to the prevalence of metabolic syndrome among patients with coronary heart disease-41% and occurs with greater frequency than in the population (10-30%). Insulin resistance is an essential feature of the metabolic syndrome that has been linked to rheumatoid arthritis (RA). Understanding how inflammation arising in one tissue affects the physiology and pathology of other organs remains an unanswered question with therapeutic implications for chronic conditions including obesity, diabetes mellitus, atherosclerosis, and RA.

The aim of our study was to investigate some criteria of MS (based on criteria recommended by the International Federation of Diabetes, 2005) in patients with RA.

The study involved 30 patients with RA who were hospitalized in the rheumatology department of Chernivtsy regional clinical hospital. The control group consisted of 20 healthy individuals. Clinical examination of each patient included general clinical and special studies. For the study of carbohydrate metabolism conducted laboratory studies of blood to the definition of indicators of blood glucose and insulin levels. The level of insulin resistance (IR) was calculated using the formula HOMA-IR. Waist circumference measured by tape at the navel.

Increased waist circumference (central obesity type) in women>80 cm in men>94 cm was observed in 40% of women and 36.7% of men in patients with RA. In the control group-25 and 20%, respectively (p<0,05). Elevated serum triglycerides level to≥1.7 mmoles/L were present in 52 % of the patients (p<0,05). IR is observed in 20% of patients with RA, diabetes type 2-3.3% increase in fasting blood glucose>5.6 mmol/l-in 23.3% of patients with RA in the control group IR 5% and improving fasting blood glucose by 10% (p<0,05). Increased blood pressure (>130/85 mm Hg) and/or the use of antihypertensive therapy was found in 46.7% of patients with RA and 10% in the control group (p<0,05).

The above studies represent small, but significant advances in the effort to understand the complex interplay between MS and RA. The prevalence of MS has been reported to be significantly higher in patients with RA as compared to the general population. Combined course of disease requires attention from clinicians to develop a differentiated approach to the prevention of metabolic syndrome among patients with rheumatoid arthritis.

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GASTROINTESTINAL MOTILITY DISORDERS IN PATIENTS WITH METABOLIC SYNDROME: A WAY OF CORRECTION

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Metabolic syndrome (MS) has attracted increasing attention of the medical community as a burgeoning global problem, with an increasing prevalence in urban populations. Approximately one fourth of the adult European population is estimated to have this disorder. The main components of the cascade of metabolic disorders or metabolic syndrome-abdominal obesity, hyperlipidemia, tissue insulin resistance, hypertension are closely related to the functional state of the digestive system. Gastrointestinal motility disorders occur in 70-80% of patients with MS that significantly affects their quality of life.

The aim is to study the efficacy and tolerability of itopride hydrochloride in patients with MS and gastrointestinal motility disorders compared to domperidone.

The study involved 30 patients with metabolic syndrome and digestive tract motility disorders. Patients were randomly and equally divided into two groups: Group 1 received Itopride

hydrochloride 50 mg thrice a day orally, Group 2 - domperidone 10 mg thrice a day orally. The basic therapy included lifestyle modification, diet, metformin, antihypertensive agents/statins if necessary. The violation of motility disorders using the scale: 3 points – significant severity of symptoms; 2 points - moderate severity of symptoms, but affects the daily activities of the patient; 1 point - mild symptoms, the normal vital functions of the patient are not affected; 0 points - no symptoms. The average value of the severity of symptoms in every group was calculated. The following variables were assessed at the beginning of research and after 2 weeks treatment: relief of symptoms (marked/complete, moderate, slight, none or worse); QT interval on ECG; adverse events; general blood count; serum chemistry for hepatic and renal functions.

Clinical manifestations of motor disorders in patients with MS included heaviness and distension in the epigastrium after eating-100% of patients, rapid early satiety - 60%, nausea after eating- 26.7%, belching- 46.7%, constipation -33.3%. In the 1st group at the end of treatment, moderate to complete relief of symptoms was reported by 73.3% patients, whereas 26.7% reported slight improvement. In the 2d group moderate to complete relief of symptoms was reported by 60.0%, whereas 20.0% reported slight improvement, and 20.0%-no improvement. Clinical tolerability was excellent in 86.7% and good in 13.3% of 1st group whereas in the 2nd group figures were 73.3% versus 20.0%, respectively. 1 patient refused to continue treatment with domperidone. None of the1st group patients had any prolongation of QT on ECG, nor did any patient show any abnormality in analysis. In the 2st group there were 2 patients with prolongation of QT on ECG. No significant changes were found in general blood count; serum chemistry for hepatic and renal functions in both groups.

Thus, at the end of 2 weeks' treatment, itopride hydrochloride shows better effectiveness and tolerability in patients with metabolic syndrome and gastrointestinal motility disorders comparing with domperidone. Itopride hydrochloride is a combined D2 receptor antagonist and acetylcholinesterase inhibitor which does not have any adverse effect on the QT interval unlike other prokinetics. No side effects while taking the itopride hydrochloride allows for maintenance therapy in an outpatient setting.

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HEART FAILURE AND DIABETES MELLITUS: FOCUS ON CHANGES OF ERYTHROCYTE MEMBRANE MORPHOLOGY

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Blood rheological properties changes are one of the crucial points in the pathogenesis of most diseases, especially in case of comorbidity. Research aimed at investigation of possible structural changes of erythrocytes membranes (EM) in patients with chronic heart failure (CHF) and diabetes mellitus type 2 (DM). Methods of the optical physics reveal and objectify structural changes of EM, which can expand the spectrum of diagnostic methods of rheological disorders detection due to various pathological conditions.

60 patients with CHF (I group) and 55 patients with CHF with comorbid DM (II group) were included in the study. For objective assessment of functional state of EM laser polarimetry of the red cell suspension smear was applied.

Intensity distribution of histogram of Fourier spectrum of erythrocytes suspension smear had symmetrical “bell-like” appearance. Unlike this, intensity distribution of Fourier spectrum of erythrocytes suspension smear of patients of II group was uneven, and histogram transformed into asymmetric dependence. Revealed fact indicates growth of anisotropic component of EM, conditioned primarily by conformational changes of the protein structure of EM due to chronic hyperglycemia (activation of the peroxic oxidation of the biopolymers and lipids, protein molecules glycolization, and, as a result, change of the conformational and spatial orientation of the protein fibrils, including integrated, of the erythrocyte membrane), accompanied by worsening of morphological features of EM. Correlation analysis showed statistically significant direct