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**SOME ASPECTS OF THE PATHOLOGY OF THE UPPER DIGESTIVE TRACT IN
PATIENTS WITH GASTROESOPHAGEAL REFLUX DISEASE
ON THE BACKGROUND OF HYPOTHYROIDISM**

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The frequency of gastroesophageal reflux disease (GERD) and the severity of the disease increase with age and the presence of comorbid pathology. The growing number of cases of combined thyroid dysfunction with gastropathology requires in-depth study of the reasons for the relationship between these processes. Pathological changes in the digestive system in these patients make their condition more severe, contributing to the development and progression of metabolic disorders. An important aggravating effect on the regulatory mechanisms of esophageal kinetics has a pathological functioning of the thyroid gland on the background of iodine deficiency.

The objective of the study was to determine the features of the pathology of the upper digestive tract in patient with GERD in combination with hypothyroidism. 65 patients with GERD with reduced thyroid function (main group) were examined. Among patients with GERD with hypothyroidism, women predominated 54 (83.1%), men accounted for 16.9% (11 patients). The control group consisted of 25 patients with GERD with normal thyroid function (control group), dominated by male patients - 13 (52%), women were 12 (48%). The mean age of patients was 46.3 ± 3.33 years. Indicators of the conditional norm are established on the basis of inspection of 30 practically healthy people.

The clinical picture of GERD was characterized by a variety of symptoms. Patients in the main group most often had pain in the epigastric region and behind the sternum, which worsened after eating, with the torso tilted forward (92.3%), bitterness in the mouth (96.9%). When we was performing express pH-measurement using a pH meter IKZh-2 noted acidification of the intra-esophageal environment in patients with GERD to 3.6 ± 0.33 , at the same time, the pH in patients with GERD on the background of hypothyroidism (the main group), do not significantly exceed level 7. Among patients with GERD on the background of hypothyroidism, erosive esophagitis was diagnosed in 23 patients (22.77%), catarrhal esophagitis in 35 (34.6%) patients, in other patients no visible changes in the mucous membrane were detected. Atrophic gastritis was diagnosed in 97 (96.04%) patients. In almost all patients on an empty stomach bile was found in the stomach. At the same time, in patients with GERD without hypothyroidism, erosive esophagitis was diagnosed in 19 patients (52.8%), catarrhal esophagitis in 13 (36.1%) patients and in 4 (11.1%) mucosal changes were not detected. Atrophic gastritis was diagnosed in 2 patients (5.55%), erosive in 10 (27.8%), and catarrhal in 24 (66.67%) patients.

Thus, in patients with GERD on the background of reduced thyroid function, alkaline duodenogastroesophageal reflux occurs as a consequence of reduced acid-forming function of the gastric mucosa and reduced contractility of the stomach and duodenum.

Shorikov E.I.

**CHANGES OF THE PLASMA'S PROTEOLYTIC ACTIVITY IN HYPERTONIC
CARRIER'S OF ALLELIC POLYMORPHISM GENE ADP RECEPTOR P2RY12 T-744C**

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We present data on the study of the association of the genotypes of platelet receptor polymorphism P2RY12-744TT (H1H2) and their dependent changes in platelet function and proteolysis in patients with hypertension and type 2 diabetes mellitus in Bukovinian region.

98 patients with type 2 hypertension and diabetes and 50 patients with hypertension without diabetes were examined. Analysis of independent loci revealed a decrease in the frequency of carriers of "protective genotypes" P2RY12-744TT (H1H1) ($p < 0,05$) in the studied population of patients with hypertension and diabetes mellitus 2. It was found that in the carriers of the "risk genotype" H2/H2 increased the rate of ADP-dependent and adrenaline-dependent platelet



aggregation and a significant increase in the content of the XIII factor of coagulation were detected. The proteolytic activity of plasma is significantly altered by the level of azoalbumin and azocasein with a decrease in the level of proteolysis in the case of the carrier of the "protective" H1 allele ($p < 0.05$).

Received data have suggested the hypothesis of the presence a dependency in the increase of the possible thrombotic complication in patients who are the carriers of "risk genotype". This group of patients should be provide more careful and serious antithrombotic prophylaxis.

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**THE COLLAGEN-INDUCED PLATELET AGGREGATION AND ARTERY STATUS
IN PATIENTS WITH ARTERIAL HYPERTENSION AND HEART FAILURE
WITH PRESERVED EJECTION FRACTION**

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Atherotrombosis is one from the recent complications of arterial hypertension (AH). The crucial role in the development of it played thrombocyte activation. Different studies have shown controversial results in blood platelet functionality profiles due to the influence of cardiovascular continuum due to the state of vessels in different places of arterial bed.

The objective of the research was to set the the types and relationship of the thrombocyte activation inducted by collagen in the clinical course of AH and heart failure with preserved ejection fraction (HFpEF). In the study we have included 102 patients (62 women and 40 men, aged 52 to 74 years) with AH with HFpEF. The 3 indexes of collagen-induced platelet aggregation (the level (LA), time (TA) and rate of aggregation (RA)) and the plasma level of NO-metabolites, the indexes of systemic vascular resistance were measured.

Using multivariate nonparametric analysis of variance we have set the significant increase of the level and rate of aggregation ($p < 0,05$) in the group of AH with HFpEF. There was not significant difference between the TA in all groups ($p > 0,05$). As for the interrelationship between the aggregation and level of NO-metabolites we have found a reliable negative correlation between the LA and NO-metabolites ($R = -0,31$; $p = 0,045$) and RA and NO-metabolites ($R = -0,26$; $p = 0,019$). Also we have set the association between the increase of general vascular resistance index and the level of collagen aggregation ($R = 0,31$; $p = 0,005$) and general vascular resistance index and the rate of aggregation ($R = 0,23$; $p = 0,04$).

So, the AH with HFpEF followed by the activation of thrombocytes, which directly deal with changes of functionality of the arteries in different places of riverbed.

Shuper V. O.

**INVESTIGATION OF THE RESPIRATORY FUNCTION CHARACTERISTICS OF
PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE COMBINED
WITH ISCHEMIC HEART DISEASE**

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WHO statistics suggests that chronic obstructive pulmonary disease (COPD) ranks 4th place in the world among causes of death, and its prevalence worldwide reaches about 210 million patients. Ministry of health of Ukraine determines the prevalence of COPD in the country is about 3000 per 100 thousand people and growing every year. Approximately 61.7% of patients with Ischemic heart disease (IHD) have comorbidity with COPD. In developed countries, COPD and cardiovascular diseases take the leading place among causes of mortality, and in recent years the clinical importance of comorbid conditions increases. In turn, the presence of comorbidity in patients with COPD causes more severe course of the disease and has more unfavorable outcomes. Acute cardiovascular events are the common cause of death in patients with COPD, while in patients with COPD reduced FEV₁ by 10% increases cardiovascular mortality by 28%.