



The leading factor contributing to the development of cardiovascular disease in patients with COPD is endothelial dysfunction, influencing to rise of the vascular tonus, pathological vasoconstriction to stimuli, platelets aggregation, proliferation and migration of smooth muscle cells, expression of adhesive molecules, and adhesion of monocytes. These conditions lead to development of defeat of target organs, progression of hypertension, atherosclerosis progression and tendency to thrombosis.

The objective of the research was to assess the severity of respiratory function disorders and the effectiveness of the therapy in patients with combined pathology of COPD and IHD. We investigated 40 patients with COPD (mean age of 69.4 ± 5.6 years). All patients were hospitalized due to acute exacerbations of COPD (infectious – 69%, non-infectious – 31%). IHD was diagnosed in 70% of patients, COPD without concomitant cardiac disease – in 30% of patients.

During the hospital period of the treatment bronchodilation therapy included tiotropium bromide 18 mcg/day by inhalation. Twice before and after treatment assessment of clinical symptoms was carried out: severity of dyspnea (MRC scale), cough (scores), bronchial patency (spirometry), state of the cardiovascular system (ECG). 1st group consisted of 28 patients (70%) (COPD, associated with IHD), 2nd group – COPD without IHD, 12 patients (30%). Duration of COPD in patients of the 1st group lasted 10.3 ± 2.2 years, in 2nd group - 8.8 ± 1.6 years, duration of IHD – 8, 4 ± 2.8 years. Spirometry data revealed the presence of bronchial obstruction in all patients (FEV₁ in patients of the 1st group was $61.3 \pm 5.6\%$, 2nd group - $68.3 \pm 6.3\%$ predicted; the Tiffeneau Index in patients of the 1st group was up to 24.9%, 2nd group - up to 25.3% less than normal range). In cases of comorbidity bronchial obstruction was prevalent in large caliber bronchi (MEF 25% - $41.2 \pm 5.3\%$), patients with COPD without IHD presented with more pronounced violation of the patency of small bronchi (MEF75% - $52.3 \pm 4.8\%$). The VC value was less than 80% of the proper levels in 50% of patients of the 1st group and in 25% of patients of the 2nd group. Bronchial obstruction was reversible in 27.5% of patients from the 1st group and in 50% of patients from the 2nd groups. Course of in-patient treatment resulted with subjective improvement in the severity of dyspnea. The prominence of bronchial obstruction was significantly decreased (rise of FEV₁ by 10.3% and Tiffeneau index by 11.4% in patients of the 1st group; 12.4% and 14.2% relatively in patients of the 2nd group) without significant changes of VC. ECG data did not reveal the negative impact of the therapy with tiotropium bromide inhalation to the cardiovascular system.

Thus, the combination of COPD and IHD is the frequent comorbid disorder, with the development of the syndrome of mutual aggravation. This combination is characterized by a more pronounced progression of COPD, is manifested by development of lung restriction and decreased reversibility of airway obstruction, reduced response to therapy with bronchodilators and worsening of quality of patients' life.

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COMPREHENSIVE ANALYSIS OF MULTIPLE CYTOKINES IN PATIENTS WITH THE CHRONIC OBSTRUCTIVE PULMONARY DISEASE COMBINED WITH THE CHRONIC PANCREATITIS

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It was established that the exacerbation of the chronic obstructive pulmonary disease is accompanied by the activation of the local inflammation in pulmonary tissue, and also is accompanied by a rise of the cytokines in the peripheral blood. This is a sign that COPD exacerbation is associated with the systemic inflammatory response.

The aim of our study was to analyze the level of some circulating pro-and anti-inflammatory cytokines, such as C-reactive protein (C-RP), interleukin-6 (IL-6), tumor necrosis factor alpha (TNF- α), interleukin-10 (IL-10) in patients with COPD combined with chronic pancreatitis (CP). 27 people suffering from COPD formed group I, 25 COPD patients with concomitant CP made the second group, and 7 healthy persons made the group of comparison.



Patients of I and II groups revealed high concentrations of IL-6 ($p<0.05$), TNF- α ($p<0.05$), CRP ($p<0.05$) and IL-10 comparing with a group of healthy individuals. However, the level of IL-6 and IL-10 in the second group was lower than in patients of group I (in 1.3 times, $p<0.05$), TNF- α (in 4.6 times, $p<0.05$), CRP (in 2.4 times, $p<0.05$).

Thus, expressed cytokine's disintegration in patients with COPD, combined with CP, on the background of the increased level of the inflammatory cytokines inadequate to the level of the anti-inflammatory IL-10 and almost no response to TNF- α , may prove the exhaustion of the anti-inflammatory factors resistance and the spread of the inflammatory response beyond the bronchopulmonary system.

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DIAGNOSTIC VALUE OF INVESTIGATION OF IL-1 β , IL-4, IL-6, IF- γ , TNF- α AND IL-1Ra CONTENT IN THE BLOOD SERUM IN REACTIVE ARTHRITIS PATIENTS OF DIFFERENT ETIOLOGY

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Objective of the research – to study levels of IL-1 β , IL-4, IL-6, IF- γ , TNF- α and IL-1Ra in blood serum in reactive arthritis patients of different etiology and their effects on the activity and clinical course of the disease. 38 patients with reactive arthritis (ReA) have been examined against the background of chronic pyelonephritis (CP) in the exacerbation phase of urogenital infection (group 1). 12 ReA patients with earlier enterocolitis (group 2) and ReA of unknown etiology (11 people – group 3) were also examined. IL-1 β , IL-4, IL-6, IF- γ , TNF- α and IL-1Ra content in the blood serum was determined in patients under study by solid-phase enzyme immunoassay method of using monoclonal antibodies (“Diaclone” reagents set, France).

An increase of IL-1 β , IF- γ and TNF- α levels as well as decrease of IL-6 and IL-1Ra blood count indices in comparison with healthy patients that denotes the implication of a cytokine, imbalance in ReA progression has been revealed in patients under study when investigating cytokine status. The direct correlative dependence relation of IL-4, IL-6 and TNF- α blood cytokine count upon ReA activity degree and reverse correlative dependence of medium strength according to IF- γ blood count has been defined. Group 1 patients had the highest IL-6 and IF- γ blood count according to the indexes of other groups, as well as the maximum expression suppression of anti-inflammatory IL-4 and IL-1Ra activity.

The use of enzyme immunoassay diagnostic test-systems allows to get the information about functional activity of different types of immunocompetent cells; about the complexity of the inflammatory process, its migration from the local to systemic level, and it is one of the most prospective methods of evaluating immune system condition in the clinical experience in order to control the inflammation activity and prognosis.

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**ВЕДЕННЯ ХВОРОГО З АЛКОГОЛЬНИМ СТЕТОГЕПАТИТОМ,
УСКЛАДНЕНИМ АНЕМІЄЮ ВАЖКОГО СТУПЕНЮ**

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Зловживання алкоголем – одна з основних причин уражень печінки, зокрема розвитку алкогольної жирової хвороби печінки.

Хворий Т. 59 років, пенсіонер, звернувся на консультацію з приводу вираженої загальної кволості, задишки, різко зниженої працездатності. З анамнезу: більше 20 років служив у структурі МВС на посадах старшого офіцерського складу. Тривалий час зловживав алкоголем. Клінічний аналіз крові: еритроцити – 1,4 Т/л, гемоглобін – 65 г/л, колірний показник – 1,3, гематокрит – 20%, середній об'єм еритроцитів – 93 фл, середній вміст гемоглобіну в еритроцитах – 35 пг, середня концентрація гемоглобіну в еритроцитах – 37 г/дл, лейкоцити – 3,4 Г/л, тромбоцити – 120 Г/л, швидкість осідання еритроцитів – 30мм/год.