



CYTOKINE STATUS IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

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ABSTRACT

This article is devoted to the actual problem of modern medicine of chronic obstructive pulmonary disease. It is these diseases that come to the fore in exceptional case. The frequency of chronic obstructive pulmonary disease every year the article reflects the modern ideas of scientists, advanced facts of scientific literature. Particular attention is paid to the cytokine status in chronic obstructive pulmonary disease.

Introduction. Chronic obstructive pulmonary disease (COPD) today is one of the most common chronic inflammatory diseases of the lower respiratory tract and is a global medical and social problem. According to WHO, today COPD is the 3rd leading cause of death in the world, about 2.8 million people die from COPD every year, which is 4.8% of all causes of death. More than 80% of these deaths occur in low- and middle-income countries (LMICs). The fears of specialists around the world regarding COPD are due not only to the widespread prevalence of the disease, but also to the high risk of serious complications leading to disability and death of the working population. COPD is a common, preventable and treatable chronic lung disease that affects both men and women around the world. The fears of specialists around the world regarding COPD are due not only to the widespread prevalence of the disease, but also to the

high risk of serious complications leading to disability and death of the working population. COPD is a common, preventable and treatable chronic lung disease that affects both men and women around the world. The fears of experts around the world regarding COPD are due not only to the widespread prevalence of the disease, but also to the high risk of serious complications leading to disability and death of the working population. COPD is a common, preventable and treatable chronic lung disease that affects both men and women around the world. COPD is a heterogeneous disease characterized by an abnormal inflammatory response of the lungs to inhaled noxious particles. Chronic obstructive pulmonary disease (COPD) develops with persistent airflow problems and chronic inflammation of the respiratory tract. Pro-inflammatory cytokines in the development and maintenance of chronic airway



inflammation in COPD are interleukin-6 (IL-6). However, IL-6 is not only a marker of lung inflammation, but is also a predictor of the risk of damage to the lung epithelium, which leads to remodeling of the bronchial tree and loss of epithelial tissue elasticity. This phenomenon plays an important role in the development of pulmonary emphysema and the progression of pathophysiological processes in patients with COPD.

Methods. 60 patients diagnosed with COPD were examined, including 42 (70%) men and 18 (30%) women. The control group consisted of 20 practically healthy individuals without a diagnosis of COPD and risk factors of a similar age. All patients underwent a complete clinical and laboratory examination at the Samarkand Regional Multidisciplinary Medical Center. The average age of extended 59.50 years. Criteria for inclusion in the study: patients diagnosed with COPD, age of patients from 40 to 65 years. The function of external respiration (PFR) was directed using a spirometer with the determination of strongly forced exhalation per second (FEV₁,%, l), forced vital capacity of the lungs (FVC,%, l), modified Tiffno index (IT=FEV₁/FVC).The study of the production of IL-6 served as the blood serum of COPD and healthy individuals.

Results. According to the degree of severity, the patients were distributed accordingly: with a moderate course - 21 (35%), load - 39 (65%) people. In 42 (70%) patients, COPD developed with severe bone symptoms. The average value of FEV₁ was 37.50% (1.02 l), FVC - 48.00%

(1.58 l), IT - 66.00%. The production of IL-6 in patients with COPD is overestimated to 293.30 pg/ml, which is 4 times higher in the results obtained in healthy individuals (p < 0.05). An inverse correlation was found between the FEV₁ indices and the measurement of IL-6 production. Patients with low FEV₁ values had higher levels of IL-6 production (r = -0.3165, -0.4319), respectively (p < 0.05).

Discussion. Maintaining high levels of IL-6 production causes persistence of inflammation, despite the relief of exacerbation. It is IL-6 that is associated with the production of protein during an exacerbation of inflammation and the effect on bronchial remodeling, due to damage to the epithelium of the lung tracts.

Conclusions: Thus, the analysis of the literature data indicates a steady increase in COPD, which is characterized by high mortality and requires significant expenditure of health care resources. All of the above may indicate the great social significance of COPD. It is important to come to an understanding that effective treatment and control of COPD justify the costs of innovative methods that provide them. A decrease in the severity of exacerbations and a decrease in the number of hospitalizations, achieved through the use of modern methods of diagnosis and treatment. Maintaining high values of IL-6 production indicates the persistence of inflammation, despite the relief of exacerbation. Currently, IL-6 is considered as one of the most important markers of systemic inflammation and a putative therapeutic target in COPD.

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