

E-SELECTIN AS A MARKER INFLAMMATORY ACTIVITY IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE

***Y. I. Feshchenko, E. M. Rekalova, O. R. Panasiukova,
L. P. Kadan, E. F. Chernushenko, V. N. Petishkina,
A. S. Firsova, J. B. Begouleva***

Summary

97 patients with acute exacerbation of COPD were examined to determine the correlation between concentration of soluble E-selectin adhesion serum molecules and clinical and immunological features of the disease. Immunological part of the study comprised an evaluation of T-, B-and phagocytosis links of immunity. The content of tumor necrosis factor alpha (TNF α) and interleukin-8 (IL-8) in blood serum and in bronchoalveolar lavage fluid, and systemic levels of E-selectin were measured using enzyme immunoassay analysis. It was established that the hyperproduction of E-selectin was accompanied by an activation of inflammatory responses: higher degree of bronchial inflammation, increased percent of neutrophils and higher concentration of IL-8 in the airways, leading to more severe course of COPD. More intensive inflammation in the airways on the background of increased production of E-selectin was associated with less inhibited production of reactive oxygen species by peripheral blood phagocytes. These data allow to use E-selectin as a marker of activity of inflammation in the airways and the severity of COPD.