RELATIONSHIP OF CHANGES LEVEL OF SYSTEM FACTORS OF INFLAMMATION AND DYSFUNCTION OF VASCULAR ENDOTHELIUM WITH SOME FEATURES OF CHRONIC OBSTRUCTIVE LUNG DISEASE

E.M. Rekalova, O.R. Panasiukova, E.F. Chernushenko, L.P. Kadan, Yu.A. Matvienko, O.V. Strafun, I.A. Kazachuk

Summary. Systemic markers of inflammation and endothelial dysfunction (tumor necrosis factor-alpha (TNFa), endothelin-1, leukocyte adhesion molecule E-selectin and soluble intercellular adhesion molecule - sICAM-1) were identified by enzyme immunoassay in 63 patients with chronic obstructive pulmonary disease (COPD) in exacerbation phase. The increased concentrations of circulating adhesion molecules and proinflammatory cytokines were found in the peripheral blood of the patients, indicating the systemic nature of inflammation in this disease. Exacerbation of COPD is accompanied by an imbalance of humoral factors of immunity (inflammatory markers) and endothelial dysfunction, which depends on the heaviness and duration of the disease, and the duration of process exacerbation.

Keywords: COPD, tumor necrosis factor-alpha ($TNF\alpha$), endothelin-1, leukocyte adhesion molecule E-selectin, soluble intercellular adhesion molecule – sICAM-1.