

# FATTY-ACID SPECTRUM OF LIPID SERUM AND ERYTHROCYTES MEMBRANES IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN ASSOCIATION WITH ARTERIAL HYPERTENSION

***M. P. Kirsanova, M. I. Tovt-Korshynska, T. S. Brjuzgina***

## *Summary*

We determined the fatty acid lipids composition of serum and erythrocytes by means of gas-liquid chromatography in patients with chronic obstructive pulmonary disease (COPD) in association with arterial hypertension (AH), as well as, in patients with COPD without AH and in patients with AH without COPD. In patients with the mixed cardiopulmonary pathology versus those without such combination the elevation of saturated fatty acid content and the reduction of unsaturated fatty acid was found, showing the activation of the lipid peroxidation processes. In patients with the mixed pathology the omega-3 fatty acids concentration in erythrocytes membranes was significantly lower and the omega-6 fatty acids – significantly higher. These changes can have negative influence on the respiratory and cardiovascular system function, possibly necessitating a pharmacological correction.