

# CLINICAL-PATHOGENETIC SUBSTANTIATION OF THE EFFECTIVENESS OF OMEGA-3 POLYUNSATURATED FATTY ACIDS IN TREATMENT OF PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASES

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## *Summary*

There were examined the patients with chronic obstructive pulmonary diseases. 42 patients (group 1) received basis therapy; 80 patients (group 2) received basis therapy plus  $\omega$ -3 polyunsaturated fatty acids (PUFA). At the end of treatment in patients of group 1 an endobronchitis was found in 47,6 % of cases; increased level of endotoxemia markers in blood, exhaled air condensate and urine in 33,3 % of cases, the markers of an inflammation in broncho-alveolar secretions in 69 % of cases; immunity deficiency condition of lungs — in 78,6 % of cases, the change of endobronchial pH — in 73,8 % of cases. In patients of group 2 the blood indices of lipid and an protein metabolism, systemic and endobronchial mechanisms of nonspecific response, the balance of oxidant/antioxidant system, nitric oxide metabolism, middle-weight proteins content and surfactant structure were restored. The mean duration of hospital stay was reduced by 4,1 days. Incubation in vitro of erythrocytes with  $\omega$ -3 PUFA decreased it sorption ability in catarrhal and catarrhal-purulent endobronchitis and did not influence the intensity of peroxidative haemolysis.