OMEGA-3 POLYUNSATURATED FATTY ACIDS AND FREE RADICAL LIPID PEROXIDATION IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASES COMBINED WITH CORONARY ARTERY DISEASE

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Summary

An activity of free radical lipid peroxidation has been analyzed in 87 patients with chronic obstructive pulmonary diseases combined with coronary artery disease in vivo and in vitro. The exacerbation of underlying disease was accompanied by intensification of lipid oxidation and decrease of enzymes catalytic activity of antioxidant system (in vivo). The inclusion of omega-3 polyunsaturated fatty acids (epadol) in complex therapy led to suppression of lipid peroxidation and improved activity of catalytic enzymes. A determination of peroxidation erythrocytes haemolysis index in vitro demonstrated its multidirectional changes: in case of sufficient endogen antioxidant protection the incubation of erythrocytes with epadol didn't influence the index and raised it in case of antioxidant system decompensation.