Gender peculiarities of lipid profile and metabolic oxygen-dependent reactions in patients with acute myocardial infarction accompanied with non-alcoholic steatohepatitis.

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It is well known that prognosis of acute myocardial infarction (AMI) in women (taking into consideration the age correction) is more unfavorable than in men. That's why studying of pathogenetic issues of AMI in women with metabolic disorders is highly important.

The purpose of the research is to determine the gender peculiarities of lipid profile changes and the state of metabolic oxygen-dependent reactions in patients with AMI accompanied with NASH.

Methods. 59 men and 36 women with AMI accompanied with NASH were examined. All women had menopause. The amount of troponin, creatine phosphokinase, transaminases was determined in blood of all patients. Also the data of liver ultrasound and liver biopsy were analyzed. The state of metabolic oxygen-dependent reactions was determined by spectrophotometric method; the levels of malonic dialdehyde (MDA) and diene conjugates (DC) were analyzed.

Results. Women had higher indexes of MDA (+10,2%, $p = 0,028$) and DC(+15,2%, $p = 0,009$) in comparison with men. Also, a decreased activity of superoxide dismutase and ceruloplasmin was revealed in women (-12,7% and - 3,3% respectively, $p < 0,05$). Disorders of blood lipid profile were determined in patients of both groups. However, women had reliably higher level of cholesterol (+15,4%, $p=0,027$), triglycerides (+22,8%, $p=0,003$) and low-density lipoproteins (+15,8%, $p=0,015$). Besides, the level of high-density lipoprotein in women was lower than in men (-17,6%, $p=0,022$).

Conclusions. Women with AMI accompanied with NASH were characterized by more significant derangements of lipid profile and higher activity of metabolic oxygen-dependent reactions than men. The mentioned above changes in women were probably caused by loss of estrogen protection due to menopause. Such changes suggest the need in more intensive hypolipidemic and antioxidant therapy in women with AMI accompanied with NASH.