

DIFFERENTIAL CHANGES OF CARDIAC BIOMARKERS AND LIPID PROFILE BY GENDER IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION ACCOMPANIED WITH NON-ALCOHOL STEATOHEPATITES

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Diagnosis and risk assessment of acute coronary syndrome in women has traditionally been more difficult, especially when taking into consideration the presence of metabolic disorders associated with non-alcoholic steatohepatitis (NASH).

The purpose of the research was to determine the gender peculiarities of cardiac biomarkers and lipid profile changes in patients with non-Q wave myocardial infarction (NQMI) accompanied with NASH.

Methods. 32 men and 30 women with NQMI accompanied with NASH were examined. All women had menopause. The amount of troponin, creatinekinase-MB (CKMB), transaminases, C-reactive protein (CRP) was determined in blood of all patients. Blood lipid test was done. Also the data of liver ultrasound and liver biopsy were analyzed.

Results. Men with NQMI accompanied with NASH had reliably higher level of troponin I (+21.8%, 27.2 ± 4.07 ng/ml, $p=0.006$) and CKMB (+16.9%, 176.7 ± 22.8 units/L, $p=0.012$) than women. However, women had significantly higher level of CRP (+31.7%, $p=0.014$) than men. Disorders of blood lipid profile were determined in patients of both groups. However, women had reliably higher level of cholesterol (+13.4%, $p=0.025$), triglycerides (+24.8%, $p=0.003$) and low-density lipoproteins (+13.7%, $p=0.016$). Besides, the level of high-density lipoproteins in women was lower than in men (-17.3%, $p=0.035$).

Conclusions. In patients with NQMI accompanied with NASH, there was a different expression of cardiac biomarkers. Men had higher levels of CKMB and troponins, whereas women were more likely to have elevated CRP. This suggests that a multimarker approach may help to assess the initial risk of NQMI in patients with NASH, especially in women. More significant derangements of lipid profile in women suggest the need in more intensive hypolipidemic therapy.