

15th Global Diabetes & Obesity Conference

November 14-15, 2016 Dubai, UAE

Diabetes mellitus of type. in patients with stabl. angina pectoris: the role of the atherogenic lipid profile and inflammatory markers

Petelina Tatiana

Tyumen Cardiology Center, Russia

Cardiovascular disease in patients with type. diabetes as cause of death is leader in virtually all countries of the world. The risk of developing coronary heart disease in patients with type. diabetes are 2-4 times higher and the risk of acute myocardial infarction. is 6-10 times higher than in the general population of patients. The condition o. lipid profile an. vascular inflammatory reaction are of great importance when shapin. coronary atherosclerotic stenosi. in patients with stabl. angina pectoris and diabetes mellitus of type 2.

Purpose: Comparable evaluation o. lipid profile and inflammatory markers i. patients with stabl. angina pectoris (SAP) and patients with stabl. angina pectoris and diabetes mellitus of type. (SAP and DM).

Material and Methods:. total of 99 patients with coronary artery disease (mean age 60.3±9.8 years) with nonsignificant coronary stenosis (< 75%) were examined. Group. included 35 patients with SAP and DM of type 2; Group II consisted of 64 patients with SAP without DM. All the patients received statins, ACE inhibitors, beta blockers. antiplatelet therapy. In Grup. all the patients receive. antihyperglycemic therapy. Lipid profile parameters (total cholesterol, triglycerides, LDL cholesterol, VLDL cholesterol, lipoprotein (a), Apo-A, Apo-B («Cobas Integra 400 plus»); inflammatory markers (hs-CRP, TNF-alpha, homocysteine, interleukine. β, 6., («IMMULITE 1000»), sCD40 L, MMP-9, TIMP-1 («Bender MedSystems and Bioscience company»); endothelial dysfunction markers (endothelin-1, nitrites («Personal Lab» and «Dynatech»). were measured.

Results: There were high levels of hs-CRP, TNF-alpha, lipoprotein (a), MMP-9, triglycerides, and endothelin-1 in both groups. The level of TIMP-1 was significantly reduced in both groups. Patients in Group. had significantly elevated levels of total cholesterol, LDL cholesterol, homocysteine, Apo-B, Apo-B/Apo A-1 ratio, IL -1. . In Group. the following positive correlations were found: between glycohemoglobin and Apo-B, Apo-B/Apo A-1 ratio, homocysteine, IL -1 β, sCD40 L; IL-6 and hs-CRP; homocysteine and LDL cholesterol, MMP-9, duration of coronary artery disease; endothelin-1 and sCD40L, TNF-alpha. It was shown that with an increase of. μmol/L in homocysteine level and of. mg/. in hs -CRP level, the risk of developing diabetes in patients with stable angina increased by 1., and 3,8 time, accordingly.

Conclusions: In patients with type. diabetes there was. significant increase in the levels of atherogenic lipid fractions as well as homocysteine, hs-CRP and IL -1. which may indicate. higher risk of developing coronary events even in the absence of significant coronary stenosis.

petelina@cardio.tmn.ru