Abstract: P486

The role of parameters of the immuno-inflammatory response in the development of repeated undesirable events in patients with unstable angina and type 2 diabetes mellitus. Results of prospective foll

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Introduction: Studying the causes of the development of vascular coronary complications after angioplasty with stenting using the assessment of biochemical parameters in the dynamic observation of patients with unstable angina pectoris with diabetes mellitus (DM) determines the relevance of the study.

Objective: To analyze the parameters of immune inflammation in patients with unstable angina (UA) without and with type 2 diabetes, to identify biochemical predictors of post-vascularization unwanted events (episode of unstable angina) after PCI.

Methods: 199 patients aged 59.5 ± 6.7 years with coronary heart disease were examined. Patients UA (n = 102) without (Gr 1, n = 79) and the presence of DM (Gr 2, n = 23) were isolated from the general group. All patients underwent PCI with stenting. Lipid profile parameters, inflammatory markers (hs-CRP, TNF-alpha, homocysteine, interleukine 1β, 6, 8, 16; sCD40 L, MMP-9, TIMP-1); endothelial dysfunction markers (endothelin-1, nitrites) were measured. Laboratory tests were evaluated at baseline and 3, 6 and 12 months after PCI.

Results: The patients with UA and stable angina in the general group differed in the level of cholesterol, Apo A-1, Apo B / Apo A-I, significantly higher in the group with SA. In the group with UA, significantly higher levels of sCD40L, MMP-9 and TIMP-1 were recorded. In patients with Gr 1 a recurrent episode of postvascularization angina was in 25.3% of patients, in the GR 2- UA in 30%. At the same time, in the Gr1, the dependence of repeated episode of post-vascularization angina on the level of IL-6 (p <0.05) was found, and in the Gr2 on the level of cCD40L, MMP-9 and TIMP-1 (p <0.05). Equally elevated levels of markers of inflammation of hs-CRP, TNF-a, endothelin-1, homocysteine in all groups support prolonged inflammatory vascular response and increase the likelihood of recurrent episodes of atherothrombogenesis.

Conclusion: The markers sCD40L, MMP-9 and TIMP-1 can be used as differential signs of the instability of the process as a whole and indicate a high risk of developing an episode of post-vascularization unstable angina in patients UA with type 2 diabetes after angioplasty.