THE ASSOCIATION OF BIOMARKERS OF ENDOTHELIAL DYSFUNCTION AND DISORDERS OF MYOCARDIAL PERFUSION

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Atherosclerosis is a process associated with a number of risk factors which via their cumulative action accelerate atherogenesis. It is believed that endothelial dysfunction, associated with inflammation and increased oxidative stress in the blood vessel wall, is in its basis. The aim of the study was to analyze the association of myocardial ischemia with the parameters of endothelial dysfunction.

We analyzed 120 patients of both sexes. The first group consisted of 70 dyslipidemic patients with type 2 diabetes mellitus and manifest atherosclerosis on a hygienic-dietary regime and statin therapy. The second group consisted of 50 dyslipidemic patients with type 2 diabetes mellitus, with no verified atherosclerotic complications. Patients in both groups were similar in age and had a similar duration of diabetes.

The analyses suggested a positive correlation of myocardial ischemia induced by exercise stress test demands with the values of citrulline, but not with the values of highly sensitive C-reactive protein and nitric oxide. In the group with clinically manifest atherosclerosis, there were significantly more positive stress test results when myocardial ischemia was concerned.

Key words: atherosclerosis, diabetes mellitus, myocardial ischemia