Levels of biomarkers of fibrosis in patients with Diabetes Mellitus type 2

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Aim:

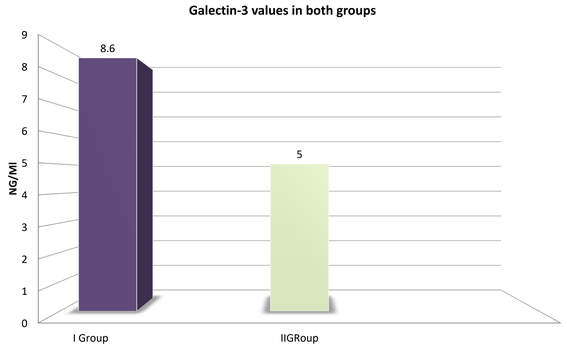
Cardiovascular disease is the leading cause of death in patients with type 2 diabetes mellitus (T2DM). An important component of the pathogenesis of cardiovascular diseases in T2DM is the development of fibrotic changes in the myocardium and vascular wall. Currently, the role of various biomarkers involved in these processes is being actively studied.

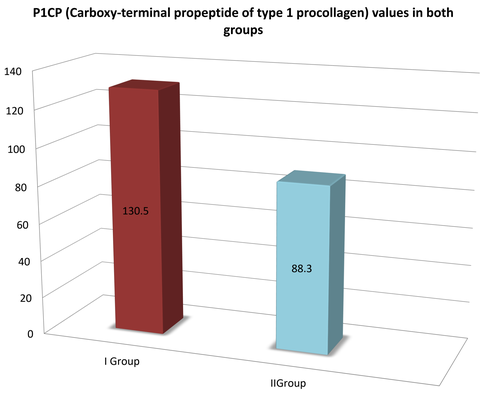
Objective:

The aim of the study was to compare the levels of fibrosis markers in diabetic and non-diabetic hypertensive patients.

Methods:

Under the study were 50 patients with essential hypertension, 20 of them with type 2 Diabetes Mellitus. All patients underwent the following studies: glycated hemoglobin, markers of fibrosis: galactin-3, P1CP (Carboxy-terminal propeptide of type 1 procollagen).





Results:

Results: The average age of the patients varied between 45-60 years. In the group of patients with Diabetes Mellitus, the initial level of HbA1c was 7.8±1.5%, the average body mass index in both groups was 34.5±3.5kg/m2. Markers of fibrosis were distributed as follows: galactin-3 in the diabetic group was 8.6±2.7ng/ml, and in the second group - 5.0±2.2ng/ml, and P1CP in the first group was 130.5±25.3ng/ml ml, 88.3±18.2ng/ml respectively in the second.

Conclusion:

Patients with DM2 have significantly higher concentrations of biomarkers of fibrosis compared with patients without DM2 .

Key words:

Type 2 Diabetes Mellitus, Fibrosis biomarkers, Galaqtin-3, P1CP