

Myostatin and Myonectin Levels as a Potential Marker for Diabetes Mellitus with and without Cardiovascular Disease

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ABSTRACT

A prevalent metabolic condition known as type 2 diabetes mellitus puts people at risk for developing diabetic cardiomyopathy and atherosclerotic cardiovascular disease. This study's objective is to measure myokines levels (myostatin and myonectin) in relationship with other clinical variatals in Iraqi diabetic patients with and without CVD to assess their possible role as a potential marker for Diabetes mellitus with and without cardiovascular disease. The study included ninety participants divided into three groups as follows; 30 (G1) T2DM with CVD, 30 (G2) T2DM without CVD and control group 30 (G3) apparently healthy participants. There was a highly significant differences in the levels of myostatin and myonectin among studied groups. there was a positive correlation between myostatin and myonectin levels and BMI, SBP, HbA1C and VLDL and highly positive correlation with FBS, HOMA-IR, TC, TG and LDL-C in T2DM with CVD while, a negative correlation with HDL-C in T2DM with CVD. Conclusion: Changes in myokinase (myostatin and myonectin) levels have an influential relationship with the emergence of complications of diabetes, which is cardiovascular disease. Therefore, high levels of myokines in diabetic patients with and without cardiovascular disease, compared to healthy people, are considered an indicator of their numbness and can be considered markers for diagnosing diabetic patients with cardiovascular disease.

Keyword: Diabetes mellitus, CVD, Insulin resistance, Myostatin, Myonectin.

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