

Evaluation of serum Adipolin levels with echocardiography and angiography finding in acute myocardial infarction patients and compared their results with stable angina patient's results

Abstract

Background and Objective: Adipolin/C1q/TNF-related protein-12 is a family of CTRPs that is highly expressed in adipose tissue and has glucose-lowering and anti-inflammatory effects. Various risk factors have been suggested in the incidence of cardiovascular diseases such as a decrease in anti-inflammatory or an increase in inflammatory factors. The purpose of the present study was to investigate the correlation of adipolin with anthropometric, angiographic, echocardiographic, and biochemical parameters

Methods: A total of 90 patients who were candidates for angiography were included in the study and divided into three groups: 30 patients with acute myocardial infarction (AMI), 30 patients with stable angina pectoris (SAP), and 30 subjects as control group with a history of chest pain but normal angiography. Anthropometric, angiographic, echocardiographic, and biochemical parameters were measured in all subjects.

Results. Serum adipolin levels were significantly decreased in patients with AMI compared with SAP and control groups ($P < 0.001$ for both). In addition, there was a negative association between serum level of adipolin and epicardial fat thickness (EFT) and Gensini score in CAD patients. The results of multivariate linear regression analysis revealed that EFT values were independently associated with serum adipolin levels

Conclusion: The current study showed an independent association of adipolin with EFT for the first time in AMI patients. Decreased adipolin levels in patients with AMI may be involved in the process of atherosclerosis, which needs further study

Keywords: Adipolin , AMI , Stable Angina