Evaluation of correlation between serum levels of Decoy receptor 3 and IL-6 with echocardiography and angiography finding in acute myocardial infarction patients and compared their results with stable angina patients results

Abstract:

Bakground and objective: Cardiovascular diseases are among leading causes of mortality worldwide. Some risk facors are hyperlipidemia, smoking and familial history. DcR3 is a member of TNFRSF superfamily which has probable affects on atherosclerosis due to its effects on inflammation process.

Methods: In this case-control study, 3 groups, each including 30 people were enrolled. First group was containing AMI patients, second group was containing SAP patients and third group was containing healthy individuals. Demographic, Echocardiographic, laboratory findings (such as DcR3 and IL-6) were gathered and been analysed.

Results: The results suggested that DcR3 levels was significantly higher in AMI patients as well as IL-6. also, EFT and EFT index were higher in AMI patients compared to the SAP and control group. More evaluations reveald a significant correlation between DcR3 with CK-MB, HsTnT, Gensini score, EFT, WBC count and IL-6 levels. also, a reverse correlation was found between DcR3 with LVEF and e' Lateral.

Conclusions: In conclusion, the current study revealed a positive association of DcR3 with EFT for the first time in AMI patients. In addition, these results represent a relationship between DcR3 and IL-6, WBC count, CK-MB, troponin-T, Gensini, and LVEF. Various factors such as atherosclerosis are involved in the pathogenesis of CAD. It has been suggested that an increase in DcR3 through inflammation may influence the process of atherosclerosis. Although this study does not show the causal link between DcR3 and CAD in patients with AMI, it suggests a role for DcR3 in these patients.

Keywords: Decoy Receptor 3, Myocardial infarction, Interleukin 6