Serum Levels of β2-Microglobulin and High Sensitive C-reactive Protein in ST-Elevated and Non.ST-Elevated Myocardial Infarction

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Abstract

Aim: Cardiovascular diseases (CVD) are the most common cause of mortality worldwide. Many risk factors can be taken into account, but recent studies have shown the definite effect of some immune response components and the possible role of some others. The present study focused on Myocardial infarction (MI); β2-microglobulin (β2M) and high sensitive C-reactive protein (hs-CRP) and their possible roles in ST elevated myocardial infarction (STEMI) versus non.ST elevated myocardial infarction (NSTEMI). Methods: Ninety patients with MI as case group and 90 sex, age and smoking-matched healthy people without the signs of CVD as the control group were enrolled in this case-control study. Demographic information and the hospital records were taken through a datasheet. In both groups, the serum levels of both groups triglyceride, fasting blood glucose, HDL, LDL, cholesterol, β2M and hs-CRP were determined. Results: The serum levels of β2M and hs-CRP were higher in the case group comparing to the control group (p=0.001). The serum levels of β2M were higher in STEMI than NSTEMI (p=0.001), but there was not a significant difference between the serum level of hs-CRP in STEMI and NSTEMI (p=0.981). Conclusions: The present study showed significant high levels of β2M and hs-CRP in patients with MI.In addition, significant higher level of β2M in STEMI versus NSTEMIwas seen in this research. Therefore, it is possible that these markers are being risked factor for patients with MI. Further studies are required to explore the role of β2M in STEMI.