

Impact of metabolic syndrome on the clinical outcomes in the patients with ST-elevation or Non ST-elevation myocardial infarction.

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[Purpose] There are several studies about the impact of metabolic syndrome on clinical outcome of patients with acute myocardial infarction and has remained unclear relationship. Based on the data of Korean acute myocardial infarction registry (KAMIR), we investigated the impact of metabolic syndrome for the clinical outcome according to ST segment elevation.

[Methods] Total 13552 patients from KAMIR were included in this study. The patients of 4024 who presented metabolic syndrome were categorized according to the presence ST segment elevation, Group I ; STEMI (n=2262, men 79%, 60.03±12.48yrs), Group II ; NSTEMI (n=1751, men 71.6%, 62.63±11.80).

[Results] Group I showed lower LVEF(p<0.001), low pre TIMI flow(p<0.001). The incidence of in-hospital death, stent thrombosis were higher in Group I(p=0.014, p=0.045), but MACE free survival showed no significant difference between two groups(p=0.284). In multi-variate analysis, DM, 3VD, low pre TIMI flow, low LVEF, and low CrCl were associated with high incidence of MACE during 12 months follow up period. We classified the patients according to the presence of ST segment elevation (STEMI group; n=6756, NSTEMI group; n=4491), and compared the incidence of MACE according to the presence of metabolic syndrome. In STEMI group, in-hospital death(p=0.006), 1 month MACE(p=0.003), 6 month MACE(p=0.003), and stent thrombosis(p=0.045) were higher in patients with metabolic syndrome. In NSTEMI group, the incidence of MACEs was similar regardless of the presence of metabolic syndrome.

[Conclusion] Metabolic syndrome is a predictor for the long term clinical outcome in the patient with ST segment elevation MI.