

Comparison of Bleeding and Major Cardiovascular Event Between Enoxaparin and Fondaparinux in Non St-Elevation Myocardial Infarction with Diabetes Mellitus

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Abstract : Background : Non ST-segment elevation myocardial infarction (NSTEMI) has been known to have comorbidities, such as diabetes mellitus (DM). Diabetic increases the risk of cardiovascular event by 2 – 4 times compared with non-diabetic (NDM) patients. In diabetic patients, there are haemostasis disturbances, such as platelet hypereactivity, hypercoagulation, and decrease of fibrinolysis. This study aims to assess the effect of anticoagulant in terms of bleeding and MACE in NSTEMI with DM.

Method : This prospective study included 67 consecutive patients with NSTEMI and DM from January – October 2018 admitted to Adam Malik General Hospital. The patients were divided into 2 groups, enoxaparin and fondaparinux. In hospital bleeding and MACE were observed. The chi-square and fisher test analysis was performed to calculate the relative risk (RR).

Result : A total 67 patients in this study, there are 51 (76%) men with mean age 55 years old. There are 7 (10.4%) patients experienced minor bleeding event. This study found that enoxaparin group showed higher bleeding event than fondaparinux group, but not significantly different (RR 2.576, *p*-value 0.259). There are 26 (38.8%) patients experienced MACE, including heart failure, cardiogenic shock, arrhythmia, and stroke. This study also found there is significantly differences in MACE between two groups, fondaparinux showed smaller MACE than enoxaparin (RR 1.946, *p*-value 0.035).

Conclusion : There are no differences in the in-hospital bleeding between enoxaparin and fondaparinux in NSTEMI with DM. Fondaparinux also showed less MACE compared to enoxaparin in this patients, but this may be influenced by several factor.

Keyword : Enoxaparin, fondaparinux, NSTEMI, DM.

Marisa K.Hazrina *et al* / International Journal of ChemTech Research, 2019,12(2): 51-57.

DOI= <http://dx.doi.org/10.20902/IJCTR.2019.120207>
