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Angiographic profile of NSTEMI patients with or without metabolic syndrome

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etabolic syndrome constitutes the clustering of clinical and biochemical risk factors, which are associated with increased Lrisk of cardiovascular events. Non-ST segment elevation myocardial infarction (NSTEMI) accounts for the important part of cardiovascular events with considerable morbidity and mortality. The aim of this study was to investigate the association of metabolic syndrome with angiographic severity of CAD in patients with NSTEMI. Objective of the study was to determine the relationship of coronary artery disease severity in patients with NSTEMI with metabolic syndrome. This was a crosssectional study, which included a total of 192 prospectively enrolled NSTEMI patients (of which 96 patients with metabolic syndrome considered as group I and equal number of 96 patients without metabolic syndrome considered as group II). The patients underwent CAG in the Department of Cardiology, National Heart Foundation Hospital and Research Institute, Dhaka during August 2013 to August 2014. CAG were evaluated via Sullivan's method. Statistically significant difference in vessel score was observed between two groups, such that triple vessel disease (TVD) was significantly higher in patients with metabolic syndrome (42.7% versus 15.6%, p<0.001) and single vessel disease (SVD) was significantly higher in patients without metabolic syndrome (45.8% versus 21.9%, p<0.001). The mean total stenosis score of patients with metabolic syndrome was also significantly higher than for those without metabolic syndrome (9.26±4.29 versus 6.06±3.07, P<0.001). The mean extension score of patients with metabolic syndrome was also significantly higher than for those without metabolic syndrome (53.70±18.11 versus 39.11±17.59, P<0.001). Correlation analysis found that angiographic scores showed a direct correlation with metabolic syndrome scores, total cholesterol, LDL-C, HDL-C, TG and waist circumference. When the components of metabolic syndrome were enrolled into multivariate linear regression analysis, it was found that individual components of metabolic syndrome waist circumference, raised BP, reduced HDL-C and elevated TG were independent predictors of high total stenosis score and extension score. Metabolic syndrome as well as individual components of metabolic syndrome, waist circumference, raised blood pressure, reduced HDL cholesterol and elevated triglyceride is independently associated with angiographically severe coronary artery disease.

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