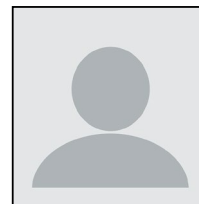


Can SYNTAX Score Be Used As A Predictor Of Angiographic No-Reflow In Patients With ST Segment Elevation Myocardial Infarction Treated With Primary Percutaneous Coronary Intervention?



Ibrahim Mahmoud

ABSTRACT

Objectives: The SYNTAX score (SXscore) has emerged as a reproducible angiographic tool to quantify the extent of coronary artery disease based on the location and complexity of each lesion. The aim of this study was to evaluate whether the SXscore is an independent predictor of no-reflow phenomenon and long-term cardiovascular outcomes in patients presented with acute ST-segment elevation myocardial infarction (STEMI) treated with primary percutaneous coronary intervention (pPCI).

Results: There were significant differences among the normal flow and no-reflow groups with respect to age, basal glucose levels, and the incidences of diabetes mellitus, Killip class, onset of presentation, TIMI risk score and previous use of statins. There were increasing rates of culprit left anterior descending lesion ($P < .001$). No-reflow phenomenon was correlated to SYNTAX score, (r value .682, P value $< .001$). At long-term follow-up, all-cause mortality, non-fatal myocardial infarction, stroke, rehospitalization due to heart failure, and the need of revascularization were significantly more frequent among the patients in the no-reflow group and highest SXscore. In multi-variate analysis, after including the SXscore as a numerical variable into the model, every point of increase was determined as an independent predictor for long-term mortality (hazard ratio [HR] 1.8, 95% confidence interval [CI] 1.139-2.95, P .013) and for overall major adverse cardiac events (MACEs; HR 1.44, 95% CI 1.33-1.56, $P < .001$).

Conclusion: The SXscore is an independent predictor of no-reflow and MACE in patients with acute STEMI undergoing pPCI.

BIOGRAPHY

Ibrahim Mahmoud Mohamed is recently working at Critical Care Department, Cairo University Hospital, Egypt. He completed his Bachelor of Medicine & Surgery (MBBCh), (Excellent with Honors) from Cairo University 2007 Cairo, Egypt. After that he completed his master's degree and M.D. Degree in Critical Care Medicine from Cairo University 2016 Cairo, Egypt.

PUBLICATIONS

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