

Acute Coronary Syndromes

HIGH SYNTAX SCORE PREDICTS WORSE IN-HOSPITAL CLINICAL OUTCOMES IN PATIENTS UNDERGOING PRIMARY ANGIOPLASTY FOR ACUTE MYOCARDIAL INFARCTION

Poster Contributions

Poster Sessions, Expo North

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Session Title: Percutaneous Coronary Intervention for AMI: Predictors of Outcome

Abstract Category: 1. Acute Coronary Syndromes: Clinical

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Background: High Syntax Score (SXscore) is predictor of adverse outcomes for stable and unstable coronary syndromes. We aimed to investigate whether high SXscore would estimate in-hospital clinical outcomes in patients with ST-elevation myocardial infarction (STEMI) undergoing primary percutaneous coronary intervention (PCI)

Methods: A total of 646 (mean age 56.1 ± 12.5 ; 516 males, 130 females) patients with STEMI undergoing primary PCI were prospectively evaluated. The SXscore was calculated on the phase of diagnostic coronary angiography. The study population was divided into tertiles based on SXscore values. A high SXscore (n=196) was defined as a value in the third tertile (>21.75), and a low SXscore (n=450) was defined as a value in the lower two tertiles (≤ 21.75). Patients were followed for in-hospital clinical outcomes.

Results: In-hospital cardiovascular mortality occurred more in high SXscore group than low group (10.7%, and 2.4%, respectively, $p<0.001$). In a receiver operating characteristic curve analysis, a SXscore value of 21.75 was identified as an effective cut-point in STEMI of in-hospital cardiovascular mortality (area under curve=0.75, 95% confidence interval 0.66 to 0.83, $p<0.001$). A SXscore value of >21.75 yielded a sensitivity of 66%, a specificity of 71.5%. A significant association was noted between high SXscore level and the adjusted risk of in-hospital cardiovascular mortality (odds ratio: 3.92, 95% confidence interval: 1.1-13.9, $p=0.03$).

Conclusions: Our findings show that patients with high SXscore undergoing primary angioplasty for STEMI have a poorer in-hospital survival, and that high SXscore represents an independent risk factor for in-hospital cardiovascular mortality.