Acute Coronary Syndromes

PHARMACOINVASIVE STRATEGY VERSUS FIBRINOLYTIC THERAPY IN PATIENTS WITH ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION: A PROPENSITY SCORE MATCHED ANALYSIS FROM THE NATIONWIDE INPATIENT SAMPLE

Poster Contributions
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Background: There is a paucity of data comparing pharmacoinvasive strategy versus fibrinolytic therapy only in real world patients.

Methods: We used Nationwide Inpatient Sample databases from 2008 to 2012 to identify all patients aged ≥18 years with STEMI who received fibrinolytic therapy and were subsequently transferred within 24 hours to a PCI-capable hospital. Propensity score matching was performed using the greedy method.

Results: A total of 3,979 (weighted, n=18,819) patients received fibrinolytic therapy and were transferred to a different PCI-capable facility within 24 hours. 1,065 (weighted, n=5,026) patients did not receive PCI and 2,914 (weighted, n=13,793) patients received PCI. Unmatched comparison demonstrated a hospital mortality of 2.1% and 7.1% in patients managed with a pharmacoinvasive strategy vs. fibrinolytic therapy alone, respectively (P <0.001). After propensity matching, hospital mortality was 3.8% with pharmacoinvasive strategy and 7.1% with fibrinolytic therapy [OR, 95% CI: 0.52, 0.35-0.76, P <0.001]. Length of stay was shorter in the pharmacoinvasive group (3.8 vs. 5.9 days, P <0.001).

Conclusion: In this large observational study, we found that a significant proportion of STEMI patients transferred for pharmacoinvasive management does not receive PCI. Propensity score-matched analysis demonstrated that pharmacoinvasive strategy was associated with lower in-hospital mortality and shorter length of stay compared with fibrinolytic therapy alone.