

IMPACT OF ATRIAL FIBRILLATION ON OUTCOMES IN PATIENTS HOSPITALIZED WITH ST- SEGMENT ELEVATION MYOCARDIAL INFARCTION.

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Acute and Stable Ischemic Heart Disease

IMPACT OF ATRIAL FIBRILLATION ON OUTCOMES IN PATIENTS HOSPITALIZED WITH ST- SEGMENT ELEVATION MYOCARDIAL INFARCTION

Poster Contributions
Poster Hall, Hall C
Saturday, March 18, 2017, 9:45 a.m.-10:30 a.m.

Session Title: Cardiac Arrest, Diabetes, and Other High Risk Features of Patients With Acute Coronary Syndrome
Abstract Category: 2. Acute and Stable Ischemic Heart Disease: Clinical
Presentation Number: 1204-323

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Background: Atrial fibrillation (AF) is reported in 7-19% patients with acute ST- Segment Elevation Myocardial Infarction (STEMI). There is a paucity of data on the impact of AF on outcomes in patients with acute STEMI.

Methods: We queried the National Inpatient Sample (NIS) database for years 2003- 2013 to identify all patients ≥ 18 years of age admitted with acute STEMI.

Results: Of the total 2,632,447 STEMI hospitalizations, AF was documented in 339,987 (12.9%) patients. At baseline, patients with AF were older (mean 74 vs 63 years, $p < 0.001$) and more likely to be female (42% vs 34%, $p < 0.001$) or white (85% vs 78%; $p < 0.001$). Hypertension, renal failure, diabetes mellitus and congestive heart failure were all more prevalent among those with AF ($p < 0.001$ for all). AF patients were more likely to undergo surgical but less likely to undergo percutaneous revascularization than non-AF patients (Table 1). Patients with AF had higher risk adjusted in- hospital mortality (16.3% vs 7.9%; OR: 1.16; CI: 1.15-1.18; $p < 0.001$) and an increased risk of bleeding complications after both PCI (12.2% vs 5.3%; OR: 1.18; CI: 1.16-1.21; $p < 0.001$) and CABG (40.0% vs 33.5%; OR: 1.11; CI: 1.08-1.13; $p < 0.001$). Average length of stay was also longer among those with AF (7 days vs 4 days; $p < 0.001$).

Conclusion: AF which is common in patients presenting with STEMI is independently associated with increased risk of all-cause in-hospital mortality and complications

Treatment and Outcomes (%)	AF	Non- AF	Adjusted Odds ratio	P value
Coronary Angiography	58.2	72.7	1.00 (0.98-1.01)	0.50
Percutaneous Coronary Intervention	41.0	61.0	0.92 (0.91-0.93)	<0.001
Coronary Artery Bypass Grafting	15.0	7.0	2.37 (2.34-2.40)	<0.001
All-cause in-hospital mortality	16.3	7.9	1.16 (1.15-1.18)	<0.001
Cardiogenic shock	14.2	7.6	1.27 (1.25-1.28)	<0.001
Bleeding complications (PCI)*	12.2	5.3	1.18 (1.16-1.21)	<0.001
Bleeding complications (CABG)	40.0	33.5	1.11 (1.08-1.13)	<0.001
Acute Ischemic Stroke	1.7	0.8	1.4 (1.35-1.44)	<0.001

*GI bleed, retroperitoneal hematoma, transfusion or acute anemia.