

## *Summary*

In the setting of ACS, AF was encountered frequently. Approximately 1 in every 7 presentations showed new-onset AF or a previous history of AF.

Atrial fibrillation (AF) has been established as an independent predictor of long-term mortality after acute myocardial infarction. However, this is less well defined across the whole spectrum of acute coronary syndromes (ACSs); which includes non ST segment elevation acute myocardial infarction and unstable angina.

So, this study aimed at determining the prognostic significance of new-onset and previous AF in patients with non ST elevation ACS.

50 patients with ACS were enrolled in this study, their age ranged from 40-75 years old. They were divided into 2 groups & assessed for baseline characteristics, admission data, ECG, echocardiography, in-hospital treatment & outcome then they followed up for 3 months.

♦ **Group I:** included the 1<sup>st</sup> 25 patients with atrial fibrillation.

♦ **Group II:** included the 1<sup>st</sup> 25 patients without atrial fibrillation.

Both previous AF and new-onset AF were associated with clinical characteristics that are known to be related to poor outcomes in patients with ACS. These included advanced age, congestive heart failure, and variables suggesting hemodynamic compromise (higher heart rates & worse Killip class).

The sex ratio & risk factors including hypertension, diabetes, smoking & dyslipidemia were similar in both groups.

Echocardiographic data were significantly affected in patients with AF in the form of greater LVESD, LVEDD, LAD, WMSI & lower EF% compared to those without AF. Also they had higher grades of LV diastolic dysfunction.

Patients with AF were less likely to be prescribed clopidogrel before their presentations or at discharge. They were less likely to be prescribed antiplatelet therapy but more likely to be on anticoagulants at discharge. Patients with AF were more likely to be discharged on anti-arrhythmic drugs as digoxin & amiodarone as well as ACE inhibitors.

AF in the setting of non ST elevation ACS was associated with significantly worse short term outcomes. The occurrence of congestive heart failure & pulmonary edema was significantly higher in the AF group than in the SR group.