

Abstract

Objectives: The aim of this study is to assess the incidence of atrial fibrillation (AF) in acute coronary syndrome (ACS) patients & its prognostic impact on the in-hospital mortality & outcome.

Methodology: The study included 500 patients (pts) admitted to Critical care department Cairo University with diagnosis of ACS. Their average age was 57.2 ± 11.2 years. Among them, males were 364 (72.2%). All pts were subjected to medical history, clinical examination, ECG, Echocardiography, routine laboratory profile (included cardiac markers) and coronary angiography. Management and different therapeutic options were dictated according to guidelines (STEMI: primary PCI or thrombolytic therapy.....etc). In-hospital mortality and morbidity were recorded. The statistical package SPSS version 15 was used and logistic regression analysis was done to test for significant predictors of new onset AF and mortality.

Results: AF was recorded in 48 patients; new onset AF was found in 7% and previous AF was 2.6%. Pts with new onset AF (as compared to pts without AF) had higher mortality (22.9% VS 4.9%, p value=0.001), cardiac arrest (31.4% Vs 6%, p value<0.001), heart failure (68.6% VS 32.1%, p value<0.001), pulmonary oedema (11.4% VS 3.3%, p value=0.040), cardiogenic shock (40% VS 11.9%, p value<0.001), major bleeding (8.6% Vs 0.7%, p value=0.006) and hospital stay (10.2 ± 10.1 VS 6.2 ± 4.2 , p value=0.039). Age, sex, pulse, LA size, EF and prior history of stroke were found to be independent predictors of new onset AF. Initial creatinine level and cardiogenic shock were found to be independent predictors of mortality.

Conclusion: Pts with new onset AF had higher mortality and morbidity rate than pts with previous AF or without AF. However when using regression analysis, new onset AF or previous AF were not independent predictors of mortality.

Key Words : atrial fibrillation - diastolic blood pressure - obtuse marginal .