Epidemiology, Prognosis, Outcome

Predictors Factors of Onset de Novo Heart failure after STEMI

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INTRODUCTION:

STEMI gets complicated very often by a heart failure (HF), which it is important to know associated factors. The aim of this study was to determinate the predictor factors of onset of de novo HF after STEMI in patients with no prior history of heart failure recorded at baseline.

METHODS:

A retrospective, descriptive study from 1 center in Morocco, including 210 patients hospitalized in a cardiology intensive care unit for STEMI from September 2019 to November 2020. The main outcomes were HF Killip class at hospital presentation and intra-hospital mortality.

RESULTS:

The main age was 59.3 ± 7.02 and Sex ratio: 2, 86. The incidence of de novo HF at admission was higher in women (40, 4% vs. 29.5%, [OR 1, 61; 95%, [CI] 0, 83-3, 11). Forty-nine point eight percent were in Killip≥ 2. The method of early revascularization was Thrombolysis in 82, 3% compared to primary coronary angioplasty without significant difference in onset of the novo HF. There was no association of age, comorbidities, delay to hospital presentation and coronary involvement with incidence of onset of de novo HF. Women had higher mortality than men with the novo HF (28, 6% vs. 20.5%; OR: 1, 55; 95%).

CONCLUSION: Gender has appeared associated to onset of de novo HF after STEMI with a superiority of the female sex after controlling for others factors described in the literature. Anterior studies have related this to the increased prevalence of microvascular disease in women predisposing them to heart failure after STEMI.