

ORAL PRESENTATION

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# Impact of in-hospital recurrent ischemia event: findings from GULF RACE-2

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## Introduction

Little in the literature is known about the long term outcome of patients with acute coronary syndrome (ACS) and in-hospital recurrent ischemic event. Accordingly; our objectives were to determine the baseline characteristics of patients, the predictors, and the long term outcome of patients with recurrent ischemia.

## Methods

The population comprised 7930 enrolled in the second Gulf Registry of Acute Coronary Events (Gulf RACE-2).

## Results

Out of the 7930 ACS patients, 172 (2.2%) had recurrent myocardial infarction (Re-MI) during their hospital stay. Patients with Re-MI were more likely to be older (mean age  $59.12 \pm 13.5$  vs.  $56.8 \pm 12.4$ ,  $P=0.016$ ), had significantly higher rate of prior history of angina (48% vs. 38.2%,  $P=0.006$ ), and hyperlipidemia (45.2% vs. 37.3%,  $P=0.027$ ) than patients without Re-MI. On admission patients with Re-MI had significantly higher HR, lower systolic BP, Killip class 4 and high GRACE risk score than those without Re-MI (27.3% vs. 17.6%), (11% vs. 4.8%), (8.1% vs. 3.2%), and (31.8% vs. 21.5%,  $P<0.05$  for all comparisons) respectively. Patients with Re-MI had a higher rate of STEMI on admission than patients without Re-MI (72.1% vs. 43.9%;  $P<0.001$ ). Re-MI patients were less likely to receive Aspirin (94.8% vs. 98.5%,  $P=0.002$ ), beta-blockers (95.3% vs. 74.7%,  $P<0.001$ ), and Statin (87.2% vs. 94.9%,  $P<0.001$ ) than patients without Re-MI. Coronary angiogram was less frequently performed on patients with Re-MI than patients without Re-MI (30.8% vs. 32.5%,

$P=0.036$ ). In hospital adverse events including HF, cardiogenic shock, VT/VF were more frequent in the Re-MI group than patients without Re-MI (44.2% vs. 12.4%), (25.6% vs. 5.3%), (7.6% vs. 2.7%;  $P<0.001$  for all comparisons) respectively. In ACS patients with Re-MI in-hospital, 30 days and 1 year were significantly higher than patients without Re-MI (23.8% vs. 4.1%), (28.1% vs. 7.7%), and (31.6% vs. 12.1%;  $P<0.001$  for all comparisons), respectively.

## Conclusions

Recognizing patients at high risk of Re-MI is important as modifying the risk factors, and managing the patient aggressively may reduce the incidence of such events and the associated morbidity and mortality.

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