BMC
Proceedings

ORAL PRESENTATION

Open Access

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

A Al-Saleh[1*], A Hersi[1], KF Alhabib[1], AA Alsheikh-Ali[2], K Sulaiman[3], H Alfaleh[1], S Alsaif[4], W Almahmeed[2], N Asaad[5], H Amin[6], A Al-Motarreb[7], J Al Suwaidi[5]

From International Conference for Healthcare and Medical Students 2011
Dublin, Ireland. 4-5 November 2011

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 compromised 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 ± 13.5 vs. 56.8 ± 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 that 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.

Author details
[1]Department of Cardiac Sciences, College of Medicine, King Saud University, Riyadh, Saudi Arabia. [2]Department of Cardiac Sciences, Sheikh Khalifa Medical City, Abu Dhabi, United Arab Emirates. [3]Cardiology Department, Royal Hospital, Muscat, Oman. [4]Cardiology Department, Saud Al-Babtain Cardiac Center, Dammam, Saudi Arabia. [5]Department of Cardiology and Cardiovascular Surgery, Hamad Medical Corporation (HMC), Doha, Qatar. [6]Cardiology Department, Mohammed Bin Khalifa Cardiac Center, Manama, Bahrain. [7]Department of Medicine, Faculty of Medicine, Sana'a University, Sana'a, Yemen.

[1]Department of Cardiac Sciences, College of Medicine, King Saud University, Riyadh, Saudi Arabia
Full list of author information is available at the end of the article

BioMed Central