Impact of Diabetes on hospital adverse cardiovascular outcomes in Acute Coronary Syndrome patients: Data from the Saudi project of acute coronary events

Khalid Alnemer
AL-Imam University, Saudi Arabia

Background: Diabetes Mellitus (DM) is a major public health problem in Saudi Arabia. DM patients who present with Acute Coronary Syndrome (ACS) have worse cardiovascular outcomes. We characterized clinical features and hospital outcomes of diabetic patients with ACS in Saudi Arabia.

Methods: ACS patients enrolled in the Saudi Project for Assessment of Acute Coronary Syndrome (SPACE) study from December 2005 to December 2007, either with DM or newly diagnosed during hospitalization were eligible. Baseline demographics, clinical presentation, therapies, and in-hospital outcomes were compared with non-diabetic patients.

Results: Of the 5055 ACS patients enrolled in SPACE, 2929 (58.1%) had DM (mean age 60.2±11.5, 71.6% male, and 87.6% Saudi nationals). Diabetic patients had higher risk-factor (e.g., hypertension, hyperlipidemia) prevalences and were more likely to present with non–ST-elevation myocardial infarction (40.2% vs. 31.4%, p<0.001), heart failure (25.4% vs. 13.9%, p<0.001), significant left ventricular systolic dysfunction and multi-vessel disease. Diabetic patients had higher in-hospital heart failure, cardiogenic shock, and re-infarction rates. Adjusted odds ratio for in-hospital mortality in diabetic patients was 1.83 (95% CI, 1.02–3.30, p=0.042).

Conclusions: A substantial proportion of Saudi patients presenting with ACS have DM and a significantly worse prognosis. These data highlight the importance of cardiovascular preventative interventions in the general population.

Biography
Khalid Alnemer did his MBBS, from King Saud University, Riyadh, and then internal medicine, interventional cardiology, nuclear and cardiac CT at McMaster University School of Medicine, Hamilton Ontario. He is the vice dean of medicine college, advisor for Saudi FDA. He has published more than 20 papers in reputed journals and serving as an Editorial Board Member at SHJ.

alnemerk@hotmail.com

Notes: