Clinical and angiographic characteristics of STEMI in young (≤ 45 years) compared with older (≥ 60 years) patients

Omar Obeidat
Jordan University Hospital, Jordan

Background: There have been few studies investigating ST-elevation myocardial infarction (STEMI) in young patients. The objective of this study is to assess the clinical and angiographic characteristics of STEMI in young (≤ 45 years) compared with older (≥ 60 years) patients.

Methods: A retrospective study was conducted on patients admitted to the Jordan University Hospital with STEMI between 2013 and 2016. Patients were stratified into two independent groups based on age (≤ 45 or ≥ 60 years). Thirty-six putative risk and prognostic factors of STEMI were differentially evaluated in relation to group membership.

Results: Twenty-nine patients were ≤ 45 years old (36% of the total). Compared with older patients (≥60 years), young patients were mostly male (97% vs 79%, P=0.048), smokers (100% vs 46%, P=0.001), have worse wall motion abnormalities (68% vs 30%, P=0.011) and less likely to be diabetics (28% vs 65%, P=0.003). Normal hemoglobin A1c (<5.7%) was more common in younger patients (50% vs 13%, P=0.013). Left anterior descending artery was the most common culprit vessel (59% vs 63%, P=0.8) in both groups. There were no significant differences between young vs old patients in total cholesterol (>200mg/dl) (32% vs 20%, P=0.3), low HDL (<40mg/dl) (68% vs 82%, P=0.2), LDL (>160mg/dl) (22.7% vs 12.5%, P=0.5) and high triglycerides (>200mg/dl) (50% vs 40%, P=0.4).

Conclusions: Young patients with STEMI are more likely to be smoking men. A larger prospective study is warranted to investigate this group of patients to prevent future events.

Biography
Omar Obeidat is currently working as an Assistant Professor of Medicine at Jordan University, College of Medicine, Amman, Jordan. He did his graduation in Medicine and Surgery from Jordan University of Science and Technology and Postgraduate Training as Chief Cardiology Fellow at Henry Ford Hospital and later on joined University of Southern California, Los Angeles, California for Interventional Cardiology fellowship.

osobaidat@yahoo.com

Notes: