

Normal Coronaries and Non-Significant Coronary Artery Disease in Patients with Acute Coronary Syndrome: Results from Acute Coronary Syndrome Israeli Survey (ACSIS) 2004-2010

Sa'ar Minha^{1,2,3}, Shmuel Gottlieb^{5,6}, Natalie Gavriellov-Yusim⁵, Rikardo Krakover^{2,3}, Ilan Goldenberg^{3,4,5}, Zvi Vered^{2,3}, Alex Blatt^{2,3}

¹Cardiology, Washington Hospital Center, USA

²Cardiology, Assaf-Harofeh Medical Center, Israel

³Sackler Faculty of Medicine, Tel-Aviv University, Israel

⁴Cardiac Rehabilitation Institute, Leviev Heart Center, Sheba Medical Center, Israel

⁵Neufeld Cardiac Research Institute, Sheba Medical Center, Israel

⁶Cardiology, Bikur Cholim Hospital, Israel

Introduction:

Part of the patients presenting with ACS are found to have either angiographic normal coronaries (NC) or non-significant coronary artery disease (NSCAD). We aimed to explore the characteristics and management of these patients.

Methods:

The Acute Coronary Syndrome Israeli Survey (ACSIS) database was utilized to compare between patients with NC (n=84), NSCAD (n=79) and those with obstructive coronary artery disease (OCAD; n=3524). Patients with prior CABG/PCI were excluded.

Results:

The baseline characteristics of the 3 groups were comparable, except for younger age and higher proportion of females in the NC group ($p < 0.05$, for both). Chronic anticoagulant therapy was more frequently used in the NC group (NC-4.8%, NSCAD-2.6% and OCAD-1.6%, $p = 0.02$). Recommended ACS evidence based medications (EBM), both in hospital and at discharge, was less often given to patients with NC or NSCAD (Figure).

Compared with 1 vessel disease group (n=1376), patients with NSCAD (n=79) shared similar baseline characteristics, but less often presented with STEMI (30.4% vs. 60.5%; $p < 0.05$). In-hospital therapy in both groups was similar, while NSCAD patients were less frequently discharged with ACS EBM therapy.

Conclusions:

The differences in STEMI and anticoagulation rates in patients with NC may indicate a dissimilar mechanism leading to ACS. In real world practice under-utilization of EBM in patients with NC or NSCAD was observed. Nonetheless, its prognostic significance is still unknown and has to be explored in larger patients' cohorts.

