FREQUENCY AND IMPACT OF PRIOR MYOCARDIAL INFARCTION AMONG PATIENTS WITH ACUTE MYOCARDIAL INFARCTION TREATED IN CONTEMPORARY PRACTICE: RESULTS FROM THE NCDR®

Poster Contributions
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Background: Despite improved secondary prevention strategies, patients with a previous MI frequently have another event; however, few studies have described contemporary features, management, and in-hospital outcomes of those with and without a prior MI.

Methods: A total of 307,646 consecutive MI patients in the NCDR® from 01/2007 until 03/2012 were studied. Baseline characteristics, home medications, and in-hospital mortality rates were compared. The NCDR® mortality model was used for adjustment (c=0.84).

Results: Prior MI was documented in 19% of STEMI (n=116,331) and 29% of NSTEMI patients (n=191,315). Patients with prior MI were older, more likely to be male, have hypertension, dyslipidemia, and diabetes mellitus, and more likely to be treated with evidence-based medications at home compared with those without prior MI. The unadjusted in-hospital mortality rates were higher with prior MI for STEMI (3.9% vs. 3.3%) and NSTEMI patients (3.7% vs. 2.9%). Nevertheless, the risk of adjusted mortality was similar with prior MI in STEMI patients (adjusted OR 1.00, 95% CI 0.90-1.10), but significantly higher in NSTEMI patients (adjusted OR 1.08, 95% CI 1.03-1.15, p=0.004).

Conclusions: More than 20% of acute MI patients have had a prior MI event and these patients have a higher burden of modifiable risk factors and are more likely to be treated with evidence-based medications before hospitalization. However, prior MI is independently associated with in-hospital mortality only in NSTEMI patients.