LACK OF STATIN USE PRIOR TO PERCUTANEOUS CORONARY INTERVENTION IS COMMON AND IS ASSOCIATED WITH INCREASED RATES OF POST-PROCEDURAL MYOCARDIAL INFARCTION

Poster Contributions
Hall C
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Authors: Mohamad Kenaan, Milan Seth, Herbert Aronow, Joseph Naoum, Stephen Peck, Douglas Wunderly, Dale Leffler, Hitinder Gurm, University of Michigan Medical Center, Ann Arbor, MI, USA

Background: Prior studies suggest that administering statins prior to percutaneous coronary interventions (PCI) is associated with lower risk of post-procedural myocardial infarction (MI) and contrast induced nephropathy (CIN). Current American College of Cardiology/American Heart Association guidelines recommend routine use of statins prior to PCI. It is unclear how commonly this recommendation is followed in clinical practice.

Methods: We evaluated the incidence and in-hospital outcomes of PCIs performed without receiving pre-procedural statins among patients undergoing PCI and enrolled in the BMC2 PCI multicenter registry between January 2010 and December 2012 at 44 hospitals in Michigan. Propensity and exact matching was used to adjust for the non-random use of statins prior to PCI.

Results: Our study population was comprised of 96,697 patients of whom 37,687 (39 %) did not receive statins prior to undergoing PCI. When compared with statin receivers, non-receivers had lower rates of cardiovascular disease, and were more likely to present for primary PCI. In the propensity-matched analysis, absence of statin use prior to PCI was associated with a higher rate of post-procedural MI (2.2% vs. 2.0%, odds ratio 1.13, p= 0.045) with no difference in in-hospital mortality, stroke, CIN or need for transfusion (Fig. 1).

Conclusion: A significant number of patients do not receive statins prior to undergoing PCI. Lack of statin use prior to PCI was associated with an increased rate of post-procedural MI.