

**ASSESSING INTER-RATER AGREEMENT OF EXPERIENCED INTERVENTIONAL CARDIOLOGISTS ON CULPRIT VESSEL IN PATIENTS WITH MULTIVESSEL DISEASE AND ACUTE NON-STEMI**

Poster Contributions
Poster Hall, Hall C
Friday, March 17, 2017, 3:45 p.m.-4:30 p.m.

Session Title: Complex Coronary Intervention: Left Main/Bifurcations and Multivessel Disease
Abstract Category: 22. Interventional Cardiology: Coronary Intervention: Left Main, Multivessel, Bifurcation
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Background: The ability of interventional cardiologists to reproducibly identify the culprit vessel in patients with multivessel coronary artery disease and non-ST elevation myocardial infarction (NSTEMI) is unknown. Inconsistency in this regard could indicate a mechanism for improved outcomes with complete revascularization in this patient population.

Methods: The National Center for Cardiovascular Disease Registry (NCDR) CathPCI database of Hershey Medical Center was used to identify 30 patients with multivessel obstructive coronary artery disease (CAD) who underwent catheterization in the setting of NSTEMI with troponin > 5. The angiograms were recorded with all identifying information and intervention clips removed. Two interventional cardiologists were asked to identify the culprit vessel. The kappa test was used to measure inter-rater agreement on both of this dimension.

Results: In regard to the culprit vessel of the NSTEMI, there were 19 observed agreements with 8.3 expected by chance alone. Agreement as assessed by Kappa was 0.47 which corresponds to a strength of agreement of "moderate."

Conclusions: The ability of experienced, academic interventional cardiologists to identify the culprit vessel in patients with multivessel CAD and NSTEMI is only moderately reproducible. It is a grade IIb indication for multivessel intervention in patients with multivessel disease and NSTEMI. The lack of agreement on culprit vessel by angiographic appearance supports this approach and postulates a mechanism for the data supporting this approach.