

on mortality is lacking. Further, it remains unknown if benefit of EIS vs. ICS persists over long-term. Therefore, we conducted a meta-analysis to compare EI and IC strategies in patients with NSTEMI-ACS at intermediate and long term follow-ups.

METHODS A systematic review of RCTs in MEDLINE, EMBASE, CINAHL, and Cochrane databases comparing early invasive with initial conservative strategy for patients with NSTEMI-ACS was performed. Random effects meta-analysis was conducted to estimate risk ratio (RR) with 95% confidence intervals (CI) for several end-points.

RESULTS A total of 14 studies with 10,786 patients were included in the cumulative analysis at 0.5-2 years follow up. Compared to an ICS, EIS was associated with significantly decreased risk of all cause death [RR 0.86; 95% 0.75-0.99], MI [0.79; 0.66-0.94], and rehospitalization due to coronary event [0.73; 0.60-0.90]. Risk of major bleeding was higher with EIS compared to an ICS [2.05; 1.49-2.82]. At longer term follow-up (10-15 years), there was no statistical difference between the two groups in terms of all-cause mortality [1.01; 0.93-1.09]. An EIS should be considered a preferred approach for most patients with NSTEMI-ACS. Further studies are needed to identify specific sub-groups who might have longer-term benefit with an EIS compared to ICS.

CONCLUSION An EIS should be considered a preferred approach for most patients with NSTEMI-ACS. Further studies are needed to identify specific sub-groups who might have longer-term benefit with an EIS compared to ICS.

CATEGORIES CORONARY: Acute Coronary Syndromes

TCT-150

Risk Factors for New-Onset Atrial Fibrillation after Percutaneous Coronary Intervention among patients with Non-ST Elevation Myocardial Infarction



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BACKGROUND Atrial fibrillation (AF) is the most common sustained arrhythmia in developed countries. It is also frequently associated with acute myocardial infarction (AMI). AMI may occur in patients with AF through different mechanisms including prothrombotic state related to atherosclerosis, direct embolization from the left atrium into a coronary artery, and high ventricular rates resulting in demand supply mismatch. While there have been studies exploring the predictors of new onset AF after AMI, there is limited data in a contemporary population of patients following non ST elevation myocardial infarction acute coronary syndrome (NSTEMI-ACS).

METHODS 743 patients discharged from the University of Massachusetts Medical Center after percutaneous coronary intervention (PCI) for NSTEMI-ACS between 2011 and 2014 were included in the analysis. Development of AF within a 30 day period was determined by comprehensive medical record review. Univariate models were constructed to identify risk factors associated with new onset AF. Factors associated with higher odds for new-onset AF were then included in multivariable regression models.

RESULTS Incidence of new onset AF within 30 days after PCI for NSTEMI-ACS was 1.89%. Individuals with new onset AF were more likely to be younger, have a history of hypertension and higher cholesterol levels than individuals free from AF (Table). Analyses showed an association of new onset AF within 30-days after NSTEMI-ACS intervention in patients with underlying heart failure (p<0.05) and with increasing age (OR1.08 SD 1.036-1.12, p<0.001).

Variable	AF	No AF	P value
Age mean, (SD)	69.1 (12.2)	72.7 (10.5)	<0.05
Smoker n, (%)	7 (13.4)	286 (30.3)	<0.05
Hypertension n, (%)	49 (94.2)	697 (73.9)	<0.05
Total Cholesterol mean,(SD)	172.8 (42.8)	153.4 (10.5)	0.01
Congestive Heart Failure, n (%)	13 (0.25)	81(6.5)	<0.05

CONCLUSION In this preliminary analysis of a contemporary cohort of patients presenting with NSTEMI-ACS, advancing age is associated with higher odds for developing new onset AF within 30-days after PCI. Since development of AF is associated with higher risk for stroke, rehospitalization and mortality, our findings have implications for monitoring and treatment of older patients with NSTEMI-ACS.

CATEGORIES STRUCTURAL: Electrophysiology

TCT-151

Abstract Withdrawn



TCT-152

Early Versus Delayed Percutaneous Coronary Intervention for Non-ST Elevation Acute Coronary Syndromes in Patients with End Stage Renal Disease: A Nationwide Analysis from 2010 to 2014



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BACKGROUND Prior studies showed that early invasive intervention might improve outcomes for high-risk patients with Non-ST elevation Acute Coronary Syndromes (NSTEMACS), however the optimal timing of invasive intervention in patients with NSTEMACS and End Stage Renal Disease (ESRD) remains inconclusive. The purpose of this study was to evaluate the clinical impact of early versus delayed percutaneous coronary intervention (PCI) in patients with ESRD hospitalized with NSTEMACS.

METHODS We conducted a nationwide retrospective cohort study utilizing the National Inpatient Sample from 2010 to 2014. Adult patients with ESRD who underwent PCI for NSTEMACS were included in the study. Patients were assigned to either early PCI group (PCI performed within 24 hours of hospitalization) or delayed PCI group (PCI performed after 24 hours). The primary outcome was in-hospital mortality. The secondary outcomes included mean length of stay (LOS), intensive care unit (ICU) admission, shock, acute respiratory failure and non-fatal major bleeding. Multivariable regression analysis was used to adjust for potential confounders including gender, age, Charlson Comorbidity Index, hospital bed size, hospital location and teaching status of hospital.

RESULTS A total of 26,505 patients were included in our study, and 48.5% of patients (12846) underwent early PCI. There was no statistical difference in age between the two groups (mean 64.9 vs 65.4 years, p>0.05). Compared with delayed PCI group, early PCI group had statistically higher in-hospital mortality rate (5.7% vs 3.5%, adjusted Odds Ratio [OR] 1.7, p<0.001), lower mean LOS (5.0 vs 8.3 days, adjusted β -3.3, p<0.001) and lower rate of non-fatal major bleeding (1.4% vs 3.0%, adjusted OR 0.5, p=0.001). There were no statistical differences in the rates of ICU admission (7.6% vs 8.9%), shock (0.65% vs 0.95%) or acute respiratory failure (12.8% vs 14.9%) (all p>0.05).

CONCLUSION PCI within 24 hours of hospitalization was associated higher in-hospital mortality rate, shorter LOS and lower non-fatal major bleeding rate in patients with ESRD and NSTEMACS. In clinical practice, high-risk patients tended to undergo PCI earlier compared with low-risk patients, which might lead to the higher in-hospital mortality rate in the early PCI group in our study. A prospective randomized controlled study is required to evaluate the optimal timing of invasive intervention in patients with ESRD and NSTEMACS.

CATEGORIES CORONARY: Acute Coronary Syndromes