

10.8% vs. 12.1%,  $p < 0.0001$ ). There was no difference in DES use between the groups (46.7% vs. 42.7% vs. 43.4%,  $p = 0.84$ ). Cardiogenic shock on presentation (14.8% vs. 12.8% vs. 4.7%,  $p < 0.0001$ ), and in-hospital mortality (7.9% vs. 6.4% vs. 1.8%,  $p < 0.001$ ) were highest in the government-sponsored group followed by private and uninsured groups.

**Conclusion:** This study demonstrates that insurance type is associated with significant differences at baseline (clinical, demographic and procedural characteristics) and hospital outcomes in patients with AMI with PCI.

## CRT-25

### Young Patients With Acute Myocardial Infarction: How Are They Different?

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**Background:** The goal of the study is to investigate baseline risk factors, coronary artery angiogram results and interventions, and hospital outcomes in young patients with acute myocardial infarction (less than 45 years vs. older than 45 years of age).

**Method:** Retrospective analysis of 779 patients treated with PCI for acute myocardial infarction (AMI) at the Los Angeles County Hospital + USC Medical Center and Keck Medical Center of USC between January 2008 and June 2011. Patients were divided into 2 groups according to age 81 young patients and 698 older patients. Baseline demographics, clinical characteristics, coronary angiogram results, PCI procedural information and hospital outcomes were compared.

**Results:** Young patients ( $> 45$  years old) represented 10.3% ( $n = 81$ ) of the total patient population (779 patients). Younger patients were found to have lower rates of diabetes (22.2% vs. 35.6%,  $p$ -value 0.03), more likely to be males (87.6% vs. 76%,  $p$ -value 0.02) and have higher triglyceride levels (212 mg/dl vs. 153.4 mg/dl,  $p$ -value 0.014). Young patients were less likely to have hypertension (41.8% vs. 66.8%,  $p$ -value  $< 0.0001$ ). Both groups had similar rates of NSTEMI (44.4% vs. 49.7%,  $p$ -value 0.37) and STEMI (55.6% vs. 50.3%,  $p$ -value 0.37). Single vessel coronary artery disease was more prevalent in the younger group (71.7% vs. 44.6%,  $p$ -value  $< 0.001$ ) and had a higher rate of total occlusion of the infarct-related artery (39.7% vs. 19.1%,  $p$ -value 0.003). Rates of percutaneous coronary artery interventions (97.5% vs. 94%,  $p$ -value 0.3) and number coronary artery stent placement (1.5 vs. 1.8,  $p$ -value 0.26) were similar between both groups, while the younger group had a lower rate of post-intervention acute renal failure (1.4% vs. 9.5%,  $p$ -value 0.02). Length of total hospital stay (4.6 days vs. 6 days,  $p$ -value 0.15) and intensive care unit stay (2.9 days vs. 3.6 days,  $p$ -value 0.32) was also similar.

**Conclusion:** Younger age in patients with AMI is associated with male predominance, higher triglyceride levels, and higher rates of single vessel disease and total occlusion of the infarct related artery. Younger patients had a lower rate of post-procedure renal failure, while the remaining post-procedural outcomes and in-hospital mortality were similar.

## CRT-26

### Chronic Pretreatment of Angiotensin Converting Enzyme Inhibitor Decreases In-hospital Adverse Events in Diabetic Hypertensive Patients with Acute Myocardial Infarction

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**Background:** Angiotensin converting enzyme inhibitor (ACEI) or angiotensin receptor blocker was commonly used in patients who have hypertension and diabetes. The aim of this study was to evaluate the effect of chronic pretreatment of ACEI or ARB before development of acute myocardial infarction (AMI) for in hospital outcome after AMI.

**Methods:** A total of 1369 diabetic-hypertensive patients (66.7 ± 10.8 years, male 59.2%) with AMI (739 ST segment elevation MI and 630 non-ST segment elevation MI) who were registered in Korea Acute Myocardial Infarction Registry from Nov. 2005 to Aug 2007. were enrolled. We excluded patients with chronic renal failure and chronic heart failure. The patients were divided into three groups: the patients with chronic pretreatment of ACEI (group I,  $n = 148$ ), the patients with chronic pretreatment of ARB (group II,  $n = 175$ ), and patients without pretreatment of ACEI or ARB (group III,  $n = 1046$ ).

The clinical characteristics and in-hospital adverse events (IHAEs) were compared among the groups.

**Results:** The baseline clinical characteristics were similar among three groups including clinical diagnosis, Killip class, laboratory parameters, strategy of treatment and angiographic findings. The group I had the lowest rate of IHAEs among the groups (group I: 9.2% vs. group II: 24.8% vs. group III: 17.6%,  $p = 0.010$ ). As compared with the group III, the group I had significantly lower rate of IHAEs (9.2% vs. 17.6%,  $p = 0.003$ ), but group II had significantly higher rate of IHAEs (24.8% vs. 17.6%,  $p = 0.049$ ). In Cox proportional hazard regression analysis, chronic pretreatment of ACEI (RR: 0.474, 95% CI 0.234-0.958,  $p = 0.037$ ) and ARB (RR: 3.261, 95% CI 1.470-7.234,  $p = 0.004$ ) were associated with IHAEs in diabetic hypertensive patient with AMI.

**Conclusion:** Chronic pretreatment of ACEI decreases IHAEs but that of ARB increases IHAEs in diabetic hypertensive patient with AMI.

## CRT-27

### Apolipoprotein B And Apolipoprotein B/a1 Ratio Are Related To Total Occlusion Of Infarct-related Artery In Non-diabetic Patients With Acute Non-st Elevation Myocardial Infarction

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**Background:** Insulin resistance (IR) is associated with a significant increase in the risk of coronary artery disease. The serum Apolipoprotein B (Apo B) and Apo B/Apo-I ratio are important markers of IR in non-diabetic, normoglycemic subjects. We investigated the role of Apo B and ApoB/Apo A1 ratio in patients with acute Non-ST elevation myocardial infarction (NSTEMI) with total occlusion (TO) of infarct-related artery (IRA).

**Methods:** A total of 280 patients (64.5 ± 12.7 years, male 70 %) with acute NSTEMI who were underwent percutaneous coronary intervention were enrolled. We excluded patients with history of diabetes, or medication of oral hypoglycemics, or hemoglobin A1c (HbA1c) more than 6.5%. The patients were divided into two groups according to the finding of IRA (Group I: patients with TO of IRA,  $n = 84$ ; Group II: patients with non-TO of IRA,  $n = 196$ ).

**Results:** The level of troponin I are significantly higher in Group I than in Group II (83.3 ± 30.1 vs. 71.6 ± 33.7 ng/mL,  $p = 0.044$ ). Most frequent IRA was left circumflex artery in Group I (50%) and Group I had more complex vascular lesion compared with Group II (Type C lesion 64.3% vs. 29.0%,  $p < 0.001$ ). The level of Apo B and Apo B/Apo A1 ratio were significantly higher in Group I than in Group II (108.1 ± 25.3 vs. 96.3 ± 25.4,  $p = 0.019$ ; 0.87 ± 0.21 vs. 0.74 ± 0.22,  $p = 0.004$ , respectively). Group I was divided into two subgroups according to initial therapeutic strategy. In subgroup analysis, early invasive treatment group had lower in-hospital adverse events than in early conservative treatment group (5.7% vs. 10.1%,  $p = 0.046$ ). In multivariate analysis, elevated Apo B/Apo A1 ratio showed high probability of TO of IRA (odds ratio, 3.56; 95% CI, 1.12 to 11.38,  $p = 0.031$ ).

**Conclusions:** The level of Apo B and Apo B/Apo A1 ratio were associated TO of IRA in patients with acute NSTEMI. The markers may be useful for choice of initial therapeutic strategy in acute NSTEMI.

## CRT-28

### What Are The Correlates For Mortality In Patients Presented With Acute Myocardial Infarct Complicated By Cardiogenic Shock?

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**Introduction:** Acute myocardial infarction (AMI) complicated by cardiogenic shock (CS) is associated with high mortality rates. This study aimed to explore the correlates for mortality in patients presented in CS complicating an AMI who were treated with primary percutaneous intervention (PPCI) and intra-aortic balloon pump counterpulsation (IABP).