

[odds ratio = 5.06 with 95% confidence interval =1.64, 15.61, p=0.002]. Patients with significant CAD had an elevated White blood cell count (m place= 128.75) as compared to the patients in the no or non significant disease group (m place=97.87, U=3355.00, p=0.001) The significant CAD group also had higher random blood sugar (m place=131.48) as compared to the patients in the no or non significant disease group (m place=98.49, U=3287.50, p<0.001). In a subgroup of patient with myocardial infarction, the odds of having used cocaine was 4.92(CI=1.37, 17.71) times higher than the patients without myocardial infarction ($\chi^2(df=1) =6.48, p=0.013$). However, overall there was no difference in the prevalence of cocaine use in the significant CAD group as compared to the non-significant CAD ($\chi^2 (df=1) =.292, p=0.059$).

Conclusion: 28.57% of patients under age < 35 years undergoing coronary angiography had significant CAD. PCAD was significantly associated with smoking, hyperglycemia, and leukocytosis. 3) Smoking continues to be an important and modifiable risk factor associated with PCAD. 4) Cocaine use in young patients is associated with higher incidence of myocardial infarction but is not a predictor of PCAD.

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Non ST Segment Elevation Myocardial Infarction Due to Complete Coronary Occlusion: Clinical Characteristics

*Abdur R. Khan, Fadi Alreefi, Sarthi R. Shah, Faraz Khan Luni, Mujeeb A. Sheikh, George V. Moukarbel
University of Toledo, Toledo, OH*

Objective: Routine electrocardiogram is unable to detect ST elevation in all patients who present with myocardial infarction due to acute total coronary occlusion. Our aim was to evaluate the incidence, distribution of the involved vessel and extent of cardiac injury in patients with non-ST elevation myocardial infarction (NSTEMI) who have acutely occluded infarct related artery (IRA).

Methods: Total occlusion of IRA was evaluated in 535 consecutive patients who presented with NSTEMI and underwent angiography. Patients were divided into groups based on the distribution of the occluded vessel; infero-lateral (left circumflex and right coronary artery) and anterior distribution (left anterior descending). Demographic and clinical characteristics were compared between these groups. The extent of cardiac injury was measured by the peak level of cardiac enzymes.

Results: The IRA was completely occluded in 78 (15%) of patients. The median time from presentation to coronary intervention was 18 hours. The occluded vessels were more common in the infero-lateral (73%) as compared to the anterior (27%) distribution. There was no significant difference between the two groups (Table 1).

Conclusions: About 15% of NSTEMI are due to a totally occluded artery; more commonly in the infero-lateral distribution. These patients represent STEMI equivalents and likely benefit from an early invasive strategy. There is need for better triage and earlier identification of these subgroups.

Table 1. Baseline Characteristics Stratified by Occluded Artery Distribution

Characteristics	Anterior (n = 21, 27%)	Infero-lateral (n = 57, 73%)	P value
Age, yrs	57.1 ± 9.9	59.5 ± 12.8	0.452
Systolic Blood Pressure, mmHg	126.4 ± 33.3	137.8 ± 37.5	0.546
Diabetes, %	52.4	52.6	0.836
Hypertension, %	76.5	75.5	0.878
TIMI Score at presentation	3.2 ± 1.2	3.0 ± 1.0	0.522
Peak CK-MB, (Median, 25th and 75th Percentile)	73 (18, 238)	117 (19, 196)	0.952
Peak Troponin, (Median, 25th and 75th Percentile)	11 (3, 31)	12 (4, 47)	0.670
Ejection Fraction, (Median, 25th and 75th Percentile)	45 (40, 52)	50 (30, 55)	0.627

Difference between means and medians compared by t-test and Matt-Whitney test respectively.

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Racial Disparity in Patients Undergoing Percutaneous Coronary Intervention for Acute Coronary Syndrome: Is it Gender Dependent?

*Lakshmana Pendyala, Joshua Lob, Al F. Omar, Rebecca Torguson, Hideaki Ota, Marco DeMagalbaesPereira, Nevin Baker, Ricardo Escarcega Alarcon, Radbika Gadesam, Lowell Satler, Augusto Pichard, Ron Waksman
MedStar Heart Institute, Washington, DC*

Background: Previous studies have shown a relation between female gender and African-American (AA) race to the adverse outcomes after percutaneous coronary intervention (PCI). This study aimed to compare the one-year clinical outcomes of patients that underwent PCI for acute coronary syndrome (ACS) stratified by the race and gender.

Methods: A cohort of 2588 patients who presented with ACS and underwent PCI from our institutional PCI registry was recorded and analyzed based on stratification for gender and race. Patients were followed for 1-year and the major adverse cardiac events (MACE), including death, Q-wave myocardial infarction, and target vessel revascularization was recorded. A multivariable Cox proportional hazards regression to adjust for confounding variables was performed to assess the contribution of the race and gender with the one-year outcomes.

Results: Both AA males and females had higher prevalence of cardiovascular risk factors compared to Caucasians. As a group AA patients had worse one-year MACE rates when compared to Caucasians (20.5% vs. 16%, p=0.004). AA also noted to have higher rate of definite stent thrombosis (2.1% vs. 0.5%, p<0.001) compared to Caucasians. In a multivariate adjusted model relative to white males, both white females and AA males had higher 1-year adjusted MACE but not AA females (Caucasians female: HR, 1.54; 95% CI 1.17-2.02; AA males: HR, 1.46; 95% CI 1.09-1.95; AA females: HR, 1.11, 95% CI 0.79-1.55). Similar results were noted with regards to death and death or myocardial infarction.

Conclusion: Though AA patients were known to have worse long term cardiovascular outcomes compared to Caucasians this disparity is mostly driven by worse outcomes in AA males but not AA females after adjusting for the differences in the baseline characteristics.

Table: Adjusted HRs for outcomes by race and gender

Outcome		IIR	Lower CL	Upper CL	p value
MACE	White female	1.54	1.17	2.02	0.002
	AA male	1.46	1.09	1.95	0.009
	AA female	1.11	0.79	1.55	0.53
Death	White female	1.67	1.21	2.32	0.002
	AA male	1.50	1.04	2.16	0.03
	AA female	1.02	0.66	1.56	0.94
Death or MI	White female	1.55	1.14	2.10	0.005
	AA male	1.50	1.08	2.08	0.01
	AA female	1.27	0.88	1.81	0.20

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Grace Score and the Angiographic Severity of Coronary Artery Disease in Patients with Non-ST-Elevation Acute Coronary Syndrome

*Ahmed El Mahmoudy Nayel, Sameh Sabet
Ain-Shams University, Cairo, Egypt*

Background: Patients hospitalized due to non-ST-elevation acute coronary syndromes (ACS) have a wide variation in their disease severity, which ranges according to clinical and laboratory characteristics. The GRACE risk score is one of most accurate way to risk stratify patients which is essential for the clinical decision and for discriminating patients who benefit from more aggressive strategies. The relation between the clinical risk scores and the anatomical severity of coronary artery disease (CAD) in patients with ACS has not been established.

Objective: To assess the relation between GRACE score and severity coronary artery disease in patients with non-ST-elevation ACS undergoing coronary angiography.

Methods: 100 patients meeting the objective criteria for NSTEMI and undergoing coronary angiography during hospitalization were consecutively enrolled. Patients were