	N =5000	N = 3583	N = 3428	N = 155	
	Group 1: Whole population	Group 2 Primary PCI	Group 3 Successfully PCI	Group 4 Failure PCI	Comparison 3-4
Age	62,6±13,6	62,7±13,5	62,4±13,4	68,2±14,0	< 0,0001
Gender					
male	3826 (76,5%)	2754 (76,9%)	2645 (77,2%)	109 (70,3%)	0,048
female	1174 (23,5%)	829 (23,1%)	783 (22,8%)	46 (29,7%)	
Diabetes					
yes	573 (11,5%)	404 (11,3%)	378 (11,0%)	26 (16,8%)	0,025
Tobacco :					
current smoker	1856 (37,1%)	1351 (37,7%)	1309 (38,2%)	42 (27,1%)	0,009
stop tobacco	1159 (23,2%)	825 (23,0%)	795 (23,2%)	30 (19,4%)	NS
Mean delay: Chest pain-PCI	210 mn		210mn	259 mn	< 0,0001
mean delay First medical contact- PCI	110 mn		110mn	127mn	0,001
mean delay Admission-PCI	40 mn		40mn	50mn	0,017
Killip at admission					
1-2	4662 (93,3%)	3330 (93,0%)	3204 (93,5%)	126 (81,3%)	< 0,0001
3-4	278 (5,5%)	204 (5,7%)	179 (5,2%)	25 (16,1%)	
Ukn	60 (1,2%)	49 (1,3%)	45 (1,3%)	4 (2,6%)	
Anti Gp2 B3a Y/N	2896 (57,9%)	2585 (72,1%)	2481 (72,4%)	104 (67,1%)	NS
Anterior STEMI	2150 (43,0%)	1542 (43,0%)	1486 (43,3%)	56 (36,1%)	0,075
LAD/Dg culprit	2057 (42,0%)	1514 (42,3%)	1461 (42,6%)	53 (34,2%)	0,038
Thrombo-aspiration Y/N	2037 (46,3%)	1821 (50,8%)	1764 (51,5%)	57 (36,8%)	< 0,0001
Stent on culprit lesion	4021 (91,5%)	3255 (90,8%)	3201 (93,4%)	54 (34,8%)	< 0,0001
Stent Thrombosis	31 (0,6%)	27 (0,8%)	27 (0,8%)	0 (0%)	NS
IABP	203 (4,1%)	170 (4,7%)	147 (4,3%)	23 (14,8%)	< 0,0001
ECMO	15 (0,3%)	12 (0,3%)	9 (0,3%)	3 (1,9%)	0,01
Death	273 (5,5%)	176 (4,9%)	137 (4,0%)	39 (25,2%)	< 0,0001
Ejection fraction	50,3±10,7	50,2±10,6	50,4±10,5	44,7±11,9	< 0,0001

CRT-110

Association of Elevated Triglycerides and Acute Myocardial Infarction in Young Hispanics

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Background: Previous studies have demonstrated that acute myocardial infarction (AMI) in young patients (age<45 years) is associated with smoking, obesity and hyperlipidemia without chronic conditions such as hypertension, established coronary artery disease (CAD) or diabetes mellitus. Young patients with AMI have also been noted to have single vessel CAD and lower morbidity and mortality when compared to their older counterparts. Features of AMI in young Hispanic patients, however, are not well-described.
Methods: Among patients undergoing percutaneous coronary intervention (PCI) for AMI at Los Angeles County + University of Southern California Hospital and Keck University Hospital, we compared young Hispanics (n=47), young non-Hispanics (n=33) and older (age ≥45 years) Hispanics (n=447). Traditional cardiovascular disease risk factors, laboratory values and in-hospital outcomes were compared. Multivariable logistic regression was performed to identify variables associated with in-hospital mortality. Another multivariable model was generated to determine variables associated with high triglyceride levels. Variables used in the triglyceride model were diabetes, BMI, Hispanic ethnicity, age<45 and the interaction between Hispanic ethnicity and age<45. The logarithm (base 10) of triglycerides was used as triglyceride values were not normally distributed.
Results: Young Hispanics had higher triglyceride and hemoglobin A1c levels than young non-Hispanics (234.5 +/- 221.0 vs. 145.3+/-67.4 mg/dL, p<0.02 and 7.9+/-3.0 vs. 6.5+/-1.5% respectively). Young Hispanics also had higher triglyceride levels than older Hispanics (234.5+/-221.0 vs. 147.0+/-98.9 mg/dL, p<0.0001). The multivariable model for triglycerides showed that BMI and Hispanic ethnicity were significantly associated with the log (base10) of triglycerides (p<0.0001 and p=0.014 respectively). The multivariable logistic regression for in-hospital outcomes showed that cardiogenic shock was associated with in-hospital mortality but Hispanic ethnicity and age<45 were not.
Conclusions: Young Hispanics with AMI have higher triglyceride and hemoglobin A1c levels than young non-Hispanics. This increased risk is likely a combination of genetic predisposition to CAD and adverse lifestyle changes experienced by a young immigrant population transitioning to life in the United States.

CRT-111

Impact of High Left Ventricular Mass Index on Peak Troponin Level After ST-Elevation Myocardial Infarction

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Background: The peak cardiac enzyme (troponin and creatine kinase [CK]) after ST-elevation myocardial infarction (STEMI) correlates strongly with infarct size. It has been reported that hypertrophied cardiomyocytes display an increased troponin concentration. Therefore, we hypothesized that the systemic release of troponin after STEMI will be disproportionally higher than that of CK in patients with a high left ventricular mass index (LVMI).
Methods: From January 2007 to August 2013, 480 patients with STEMI were retrospectively reviewed. Of the 480 patients, 203 patients were excluded (30 with history of myocardial infarction, 25 without CK elevation and 148 with missing values) and 277 patients were included in the final analysis. Troponin I and CK levels were measured every 6 hours. The peak troponin I to peak CK ratio (TCR) was calculated and TCR value higher than +1SD (n=35) was defined as high TCR and others were included in controls (n=242). LVMI was calculated according to the guideline from the American Society of Echocardiography. Clinical data, angiographic characteristics, left ventricular ejection fraction (LVEF) and LVMI were assessed for the association with high TCR.
Results: Peak troponin I levels were 284.6±405.4 ng/mL in high TCR group and 94.9±110.5 ng/mL in controls (p=0.01), but there was no significant difference in peak CK value (2984±2571 U/L vs. 2896±2903 U/L, p=0.85). Patients with high TCR were significantly older (68±12 yrs vs. 58±11 yrs, p<0.001) and had higher LVMI (99.2±21.8 g/m^2 vs. 89.4±20.2 g/m^2, p=0.01), lower estimated glomerular filtration rate (69±23 ml/min/1.73m^2 vs. 82±24 ml/min/1.73m^2, p=0.003) and lower LVEF (41±16% vs. 48±14%, p=0.01). With multivariate analysis, high TCR was independently associated with an advanced age (odds ratio 1.06; 95% confidence interval, 1.03 to 1.10; p<0.001) and high LVMI (odds ratio 1.02; 95% confidence interval, 1.00 to 1.04; p=0.03), but not with estimated glomerular filtration rate (odds ratio 0.99; 95% confidence interval, 0.97 to 1.01; p=0.22) or LVEF (odds ratio 0.98; 95% confidence interval, 0.95 to 1.00; p=0.10).
Conclusions: A high TCR after STEMI was significantly associated with an advanced age and high LVMI. Therefore, the peak troponin level may overestimate infarct size compared to CK in this population.