

1078-105 Non-Black Minorities and Outcome in the National Registry of Myocardial Infarction 2 (NORMI 2)

J.G. Canto, H.A. Taylor, Jr., B. Sanderson, W.J. Rogers for the NORMI 2 Investigators. *University of Alabama Medical Center, Birmingham, AL, USA*

Few reports have examined treatment patterns and outcomes among Hispanics, Asians and Native Americans with acute myocardial infarction. Data from the NORMI 2, which has enrolled 275,046 patients from June 1994 to April 1996, was analyzed to better understand the presenting characteristics, treatment patterns, and mortality among non-Black minorities compared to Whites.

	Whites	Hispanics	Asians	N Amer
N	236,166	6,896	2,725	813
Mean age, years	67	63*	65*	61†
Male, %	63	65*	68*	67†
Diabetes mellitus, %	24	38*	32*	38*
Hypertension, %	48	51*	53*	49
Sx onset to arrival, min	122	135*	128	144*
Acute reperfusion, %	38	38	36	39
Coronary angiogram, %	39	43*	39	41
PTCA or CABG, %	23	24*	23	21
Unadjusted mortality, %	10.3	9.5‡	10.2	10.8

*p ≤ 0.001; †p ≤ 0.01; ‡p ≤ 0.05 compared to Whites

After adjusting for relevant factors, no significant differences in overall mortality were present between White and non-Black minorities.

Conclusions: Among patients hospitalized with acute myocardial infarction, non-Black minorities compared to Whites are frequently younger, male, have a higher prevalence of diabetes and hypertension, and present much later to the hospital after the onset of symptoms. However, once in the hospital, non-Black minorities are as likely as Whites to receive acute reperfusion therapy, undergo coronary angiography and subsequent revascularization. There are minimal differences in hospital mortality among the groups.

1078-106 Mortality, Morbidity, Resource use and Quality of Life Following Q- vs Non-Q-Wave Infarction and Thrombolytic Therapy: A GUSTO-I Substudy

A. Barbagelata, R.M. Califf, E.B. Sgarbossa, S. Goodman, D. Knight, D.B. Mark, C.B. Granger, M.D. Benazzi, A. Calvo, K. Gates, D.A. Agranati, S. Starr, Q. Song, B. Mautner, G.S. Wagner. *Fundación Favaloro, Buenos Aires, Argentina, Duke Clinical Research Inst., Durham, NC, USA*

Non-Q-wave MI post-thrombolysis may carry lower mortality than Q-wave MI but also more angina and resource use and poorer quality of life. We studied this hypothesis for non-Q- (n = 555) vs Q-wave (n = 1275) first MI in the GUSTO-I Economics/Quality of Life substudy. Baseline factors in Q and non-Q wave pts. included age 59 (both); males 74%, 66%; Killip I 88%, 90%; anterior MI 34%, 35%.

	30 days			1 year		
	Q	non-Q	p	Q	non-Q	p
Mortality, %	4.5	1.6	0.01	6.8	4.7	0.04
Chest pain, %	31	29	0.38	23	22	0.70
Dyspnea, %	30	29	0.64	31	33	0.52
Angiography, %	5.2	6.9	0.15	19	21	0.56
PTCA, %	2.4	4.3	0.02	11	12	0.90
CABG, %	1.3	1.6	0.53	6.2	5.4	0.59
Rehospitalized, %	10	13	0.09	37	40	0.53
Well-being, median	32	32	0.22	34	33	0.05
DASI, median	19	19	0.42	37	33	0.31

Conclusion: Pts with non-Q wave MI post-thrombolysis have lower 30-day and 1-year mortality, but no increase in angina or interventions and similar quality of life when compared to pts with Q wave MI.

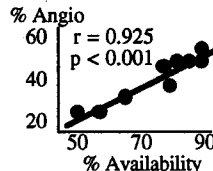
1078-107 Is There a Relationship Between the Utilization of Cardiac Procedures for Acute Myocardial Infarction and the On-Site Availability of Those Services?

J.G. Canto, W.J. Rogers, W.J. French, J.M. Gore, N.C. Chandra, R. Perdock for the NORMI 2 Investigators. *University of Alabama Medical Center, Birmingham, AL, USA*

In-hospital availability of services may be a very important determinant of their use. Data from 275,046 patients enrolled in the National Registry of Myocardial Infarction 2 were analyzed to determine the correlation (r) between the availability of cardiac procedures and the proportion who underwent such

services by each payer group among the 9 US Census regions. Only those regions with at least 7 participating hospitals were included in this analysis.

Payer	%	US Census Regions CATH		PTCA		CABG	
		r	pvalue	r	pvalue	r	pvalue
All		0.925	<0.001	0.971	<0.001	0.927	<0.001
Medicare	56	0.960	<0.001	0.927	<0.001	0.942	<0.001
Private	26	0.876	0.004	0.952	<0.001	0.930	<0.001
HMO	9	0.721	0.11	0.836	0.04	0.980	<0.001
Self-pay	6	0.730	0.16	0.816	0.09	0.868	0.06
Medicaid	3	0.844	0.16	0.790	0.21	0.911	0.09



% Angiography vs % Availability for all patients by the 9 US Census regions

Conclusion: For the overall population, there is a strong correlation between the on-site hospital availability and utilization of coronary angiography, angioplasty or bypass surgery among the US Census regions. This relationship, which also appears throughout each payer group, is strongest amongst the three largest payers (medicare, private, and HMO) with the others showing important trends towards this association.

1078-108 Importance of Posterior Chest Leads in Suspected Acute Myocardial Infarction with Non-diagnostic Routine ECG

J. Agarwal, K. Khaw, F. Aurignac, A. LoCurto, UMDNJ-Robert Wood Johnson Medical School, New Brunswick, NJ, USA

Thrombolytic therapy has become a standard treatment for acute myocardial infarction (MI). However, many patients do not receive thrombolytic therapy either because of contraindications or absence of ST elevation in routine ECG. Circumflex coronary artery (Cx) occlusions frequently affect the posterior part of the heart. Hence posterior leads (V₇-posterior-axillary line, V₈-inferior angle of scapula, V₉-left para-vertebral area) were recorded in 33 patients suspected of acute MI with non-diagnostic 12-lead ECG. Of these, 12 patients (8 male, 4 female, mean age 59 years) showed only posterior injury pattern. Of the remaining 21 patients, 10 had non-Q MI, and 11 ruled out for MI. Of the 12 patients with posterior MI, the ECG patterns were the following: 8 patients showed more than 1 mm ST elevations and 4 showed significant Q-waves in 2 or 3 posterior leads, 4 had significant R waves in V₁-V₂, and 6 had ST depression in anterior leads. CPK's with positive CPK-MB were noted in 10 of 12 patients, varying from 723 to 7562. One patient died before CPKs were available.

Coronary Angiogram of 12 Posterior MI	Culprit Vessel
No Significant lesions* (n = 1)	None
One vessel disease (n = 5)	Cx in 5
Multivessel disease (n = 4)	Cx in 4
CABG (n = 2)	Native Cx in 1 & OM CABG in 1

*This patient had no CPK spillage.

Of the 33 patients screened, two patients had received thrombolytic treatments, because of ST elevations in posterior leads.

Conclusion: 1) posterior leads are helpful in suspected acute MI with non-diagnostic routine ECG. 2) Isolated posterior lead ST elevation is usually accompanied by Cx occlusion.

1078-109 Association of Depressed 24-Hour Heart Rate Variability with Mortality in the EMIAT Trial

M. Malik, A.J. Camm, D.G. Julian, G. Frangin, M.J. Janse, P.J. Schwartz, P. Simon for the EMIAT investigators. *St. George's Hospital Medical School, London, England, Sanofi Recherche, Montpellier, France*

The EMIAT trial investigated the effects of Amiodarone vs Placebo in post infarction patients with left ventricular ejection fraction (LVEF) ≤ 40% and age ≤ 75 years. This study investigated the association of reduction of baseline 24-hour heart rate variability (HRV) with cardiac arrhythmic and cardiac non-arrhythmic death in pts of the EMIAT trial. Baseline 24-hour HRV data were available in 1181 pts (592 in Placebo group) in whom 67 (Placebo 40) cardiac arrhythmic and 59 (Placebo 25) cardiac non-arrhythmic deaths were recorded during a follow-up of up to 2 years. By varying the dichotomy limits of HRV triangular index in a systematic fashion, a statistical association