JACC March 3, 2004

1. W with ACS who undergo coronary angiography have similar rates of STEMI, NSTEMI, & biomarker release despite differences in baseline characteristics.

2. Evidence based medical therapy is similar except W are less likely to receive lipid lowering therapy than M (62% vs. 69% p<0.03)

3. We observed an apparent gender bias in revascularization favoring more PCI/CABG in M.

4. Treatment bias against W with ACS receiving less revascularization was not due to gender but rather to differences in severity of epicardial coronary obstruction.

	M (1123)	W (601)	P value
Demographics			
Age yrs	62	67	<0.0001
Heart Failure %	17	25	<0.0001
BP systolic mmHg	138	142	0.004
Tobacco %	70	50	<0.0001
	-		
Cardiac Enzymes +	72	71	0.44
PCI or CABG %	52	41	<0.0001
PCI %	45	33	<0.0001
CABG %	7.3	8.2	0.49
Angiography %			
Normal/mild CAD	31	43	<0.0001
1 vessel	18	16	0.20
2 vessel	16	16	0.88
3 vessel	22	18	0.04
Left main	3.3	2.2	0.18

1097-97 Safety of Stress Testing Following an Acute Coronary Syndrome

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Background: The safety of stress testing within 72 hours following an acute coronary syndrome has not been established.We hypothesized that performance of a stress test within 48 to 72 hours after unstable angina (UA) or non-ST segment elevation myocardial infarction (NSTEMI) would be safe. Methods: Patients (n=1,106) were drawn from the conservative arm of the TACTICS/TIMI 18 trial. In TACTICS, 2,220 patients with UA/ NSTEMI were treated with aspirin, heparin, and tirofiban, and randomized to an early invasive strategy or to a conservative strategy in which cardiac catheterization was performed only if the patient had objective evidence of recurrent ischemia or an abnormal stress test performed within 48 to 72 hours. Results: Of the 847 patients undergoing stress testina. 494 underwent an exercise treadmill test (mean ± s.d. duration: 7.6 ± 3.2 min), and 353 underwent a pharmacologic stress test with adenosine (n=122), persantine (n=152), or dobutamine (n=79). Per protocol, patients who developed spontaneous recurrent ischemia prior to stress testing underwent a cardiac catheterization instead, and a total of 259 patients in the conservative arm did not undergo a stress test. Mortality at 30 days was 0.94% (8/847) among the patients who underwent a stress test. One of the deaths occurred on the day of stress testing (mortality = 0.12%). Both of the patients who died within 24 hours of stress testing had an elevated admission troponin, and one also had transient ST segment elevation on the admission ECG. Only one patient suffered an MI on the day of stress testing. Conclusions: In patients with UA/NSTEMI treated with aspirin, heparin, and tirofiban, performance of an exercise or a pharmacologic stress test is safe within 48 to 72 hours after admission.

1097-98 Early Continuous ST Monitoring Identifies Acute Coronary Syndrome Patients at High Risk of Death and Myocardial Infarction Despite Contemporary Treatment

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Background: Previous small studies suggest continuous ST segment (Holter) monitoring early after presentation can identify high risk patients with acute coronary syndromes (ACS). However, it is unclear whether this technique remains useful in the contemporary era of anti-thrombotic therapies.

Methods: In 2 randomized clinical trials comparing enoxaparin with unfractionated heparin ± eptifibatide (INTERACT and ESSENCE ECG substudy), 853 patients with non-ST elevation ACS underwent early continuous 96 hr Holter monitoring analyzed by an automated algorithm and reviewed by cardiologists blinded to clinical data. Outcomes at 30 days were independently adjudicated. We examined the prognostic value of Holterdetected ischemia (HI; ≥0.1 mV ST deviation ≥1 min duration).

Results: Of the 853 patients enrolled, 261 (30.6%) had HI (see Table).

30-day outcomes	Patients without Holter Ischemia (N=592)	Patients with Holter Ischemia (N=261)	Odds Ratio [OR] (95% Cl)	P value
Death/Myocardial Infarction (MI)	3.4%	10.7%	3.4 (1.9-6.2)	<0.001
Death	1.0%	5.0%	5.1 (1.9-13.6)	0.001

After adjusting for other prognosticators including cardiac biomarker status, HI remained a strong predictor of death/MI [OR 3.5 (1.9-6.4), P<0.001] and all-cause mortality [OR 4.3 (1.6-11.7), P=0.004] at 30 days. In multivariable analysis, renal dysfunction and ST deviation were independently associated with HI, while enoxaparin treatment significantly reduced the incidence of HI [OR 0.41 (0.28-0.60), P<0.001].

Conclusion: HI is a powerful independent predictor of mortality and MI among ACS patients treated in the modern era. This simple tool provides incremental prognostic value over the conventional risk stratification of non-ST elevation ACS patients.

1097-99 Racial Differences in Utilization of Primary Prevention Strategies and Cardiac Catheterization Following First Myocardial Infarction

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Background: Primary prevention strategies such as aspirin, ACE inhibitors and lipid lowering drugs may reduce the incidence of myocardial infarction (MI) in patients without known coronary heart disease. We assessed the hypothesis that racial differences exist in the implementation of primary prevention strategies.

Methods: In 1571 patients presenting between 1997-2001 with first acute MI and no prior angina, MI or revascularization, we investigated the presence of racial differences in the use of primary prevention.

Results: African American (AA) versus Caucasian patients had higher rates of diabetes and hypertension with lower rates of hyperlipidemia (see table below). Rates of aspirin, beta blocker, and lipid lowering drug use did not significantly differ according to race; however, AA patients were more likely to receive ACE inhibitors prior to MI and less likely to undergo post-MI catheterization.

Conclusions: Minimal differences exist in the use of MI primary prevention strategies between Caucasian and AA patients. Following first MI, however, AA patients are less likely to undergo aggressive evaluation with cardiac catheterization and revascularization.

	Caucasian (n=832)	African-American (n=739)	p-value
Hypertension	50%	71%	<0.001
Diabetes	22%	30%	0.0007
Smoking	61%	61%	0.86
Hyperlipidemia	36%	25%	<0.0001
Lipid Lowering Drugs	16%	13%	0.19
Aspirin	21%	19%	0.33
Beta-Blockers	13%	13%	0.19
ACE inhibitors	18%	22%	0.03
Catheterization	61%	43%	<0.0001

POSTER SESSION

Unstable Ischemic Syndromes: Risk Assessment and Outcomes I

Monday, March 08, 2004, 3:00 p.m.-5:00 p.m. Morial Convention Center, Hall G Presentation Hour: 3:00 p.m.-4:00 p.m.

1098

1098-77 TIMI, PURSUIT and GRACE Risk Scores in Acute Coronary Syndromes: Comparison and Interaction With Myocardial Revascularization

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Background: Regarding prognosis, patients with a non-ST elevation acute coronary syndrome (ACS) are a very heterogeneous population, with varying risks of early and longterm adverse events. Early risk stratification at admission seems to be essential for a tailored therapeutic strategy.

Objective: We sought to compare the prognostic value of three ACS risk scores (RS) and their ability to predict benefit from myocardial revascularization performed during the initial hospitalization.

Methods: We studied 460 consecutive patients admitted to our CCU with an ACS. For each patient, the TIMI, PURSUIT and GRACE RS were calculated. Their prognostic value was evaluated by the combined incidence of death (D) or myocardial infarction (MI) at 1 year. The best cut-off value for each RS, was used to assess the impact of myocardial revascularization on D or MI at 1 year.

Results: D or MI at 1 year was 15.4% (32 D/ 49 MI). The best predictive accuracy for D or

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