

POSTER SESSION

1097

Strategies of Care in Acute Coronary Syndromes

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.

1097-93**Paradoxical Utilization of Invasive Cardiac Procedures for Patients With Non-ST-Segment Elevation Myocardial Infarction: An American-Canadian Comparison From the CRUSADE Initiative and Canadian Registries**

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Background: Clinical trial evidence supports an early invasive strategy for treatment of pts with high-risk non-ST-segment elevation (NSTEMI) acute coronary syndromes (ACS). This approach has not been evaluated in contemporary practice in North America.

Methods: We included NSTEMI pts (CK-MB or troponin >upper limit of normal) from the US CRUSADE Initiative (n=38,373; 394 hospitals, 49 states, 2000-02) and the first Canadian ACS (n=5,312 suspected ACS; 51 hospitals, 9 provinces, 1999-2001), and second Canadian (n=1,258 suspected NSTEMI ACS; 31 hospitals, 7 provinces, 2002-03) Registries. Pts were divided into risk categories by a modified PURSUIT score.

Results: Compared with Canadians, US pts were younger, more likely to be female and to have a higher rate of prior hypertension, diabetes, heart failure, revascularization, and initial ST depression (all p<0.0001). US pts had higher initial (≤ 24 hr) use of clopidogrel/ticlopidine and GP IIb/IIIa inhibitors; aspirin and heparin use were lower (all p< 0.05). Table shows differences in risk level, angiography rates/timing, revascularization rates, and unadjusted clinical outcomes (all p \leq 0.02; 25th, 75th percentiles).

Conclusions: The inverse relation between risk level and both frequency and timing of angiography for pts in both countries suggests that a risk stratification-guided approach is not consistently employed. While initial risk is lower, Canadian pts have fewer in-hospital procedures and higher rates of repeat MI.

	CRUSADE	Canadian ACS I + II
No. of patients	38,373	2,048
Initial risk (%)	22.7	33.2
Low	23.2	28.8
Moderate	50.0	38
High		
Rate of angiography by risk	63.5	50.2
Overall	76.9	59.9
Low	73.8	55.5
Moderate	51.5	37.9
High		
Median time to angiography (hrs*) by risk	24 (10,50)	96 (48,168)
Overall	21 (6, 41)	96 (48,144)
Low	23 (9,46)	96 (48,168)
Moderate	30(14, 63)	120 (72,192)
High		
Angiography =48 hours of admission (%)	42.7	13.4
PCI (%)	37.4	22
CABG (%)	10.7	7.3
Post-admission re MI (%)	4	7.4

1097-94**Early Versus Delayed Intervention in Non-ST-Elevation Acute Coronary Syndromes: A Natural Experiment From the CRUSADE Initiative**

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Background: Patients with non-ST-elevation acute coronary syndromes (NSTEMI ACS) who present on weekends are less likely to receive catheterization within 24 hours than those presenting during the week. This presents a natural experiment for exploring very early vs. later intervention and patient outcomes.

Methods: We used the CRUSADE Initiative to compare patient characteristics, treatments, and outcomes for 47,076 patients with NSTEMI ACS according to the day of presentation. Weekend presentation was defined as 5 pm Friday-7 am Sunday (n=9,063), while Weekday presentation was defined as any other time (n=38,013).

Results: While admission day had almost no impact on baseline clinical characteristics and use of most medical treatments, patients admitted on Weekends were only half as likely to receive catheterization within 24 hours of admission compared with those admitted on a Weekday (p<0.001). Rates of in-hospital adverse events including death and recurrent MI were similar for the 2 groups. The risk-adjusted odds ratio for mortality for Weekend vs. Weekday patients was 1.03 (95% CI 0.90-1.12). Findings were similar in age, and diabetes subgroups, and when the definition of Weekend presentation was expanded to 7 pm Friday-7 pm Sunday .

Conclusion: Although weekend presentation is associated with modest delays in invasive management among patients with NSTEMI ACS, in the context of contemporary medical therapy this does not appear to increase adverse events.

Time to catheterization and outcomes

Variable	Weekend N= 9063	Weekday N= 38013	p value
Mean time to catheterization (hrs)	51.9	37.8	<0.0001
Cath within 6 hrs (%)	9.1	14.9	<0.0001
Cath within 12 hrs (%)	12.0	19.3	<0.0001
Cath within 24 hrs (%)	17.1	34.5	<0.0001
Cath within 48 hrs (%)	33.5	48.7	<0.0001
Death (%)	5.1	4.8	NS
Re-infarction (%)	3.1	3.4	NS
Length of stay (days) median, (25 th , 75 th percentile)	4 (3, 7)	4 (3, 7)	NS

1097-95**Differences in the Rate of Invasively Confirmed Coronary Artery Disease Between Women and Men Presenting With an Acute Coronary Syndrome Without ST Elevation**

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Objective: do women with acute coronary syndrome (ACS) without ST elevation have a similar rate of angiographically confirmed coronary artery disease (CAD) and immediate percutaneous coronary intervention (PCI) as men?

Methods: In 2002 a total of 123328 consecutive invasive procedures were prospectively enrolled into a central registry. 18070 angiographies were performed in patients with acute coronary syndrome without ST elevation. 33 % female, mean age 65 years. CAD: presence of any coronary stenosis ≥ 50 %.

Results:

Table 1: Angiographic diagnosis

	8.3	15.2	<0.0001
No CAD (%)			
CAD (%)	89.3	78.5	<0,0001
Other cardiac disease (%)	2.4	6.3	<0,0001

Table 2: Treatment

	Male n=10897	Female n=4604	p-value
Conservative (%)	24.5	27.9	<0.0001
CABG (%)	20.8	19.1	<0,0001
PCI (%)	54.7	53.0	<0,0001
Immediate PCI performed (%)	49.8	48.1	0.049

Conclusions: In clinical practice coronary angiography in patients presenting with ACS without ST elevation reveals a higher rate of patients without CAD in women. In patients with CAD the rate of immediate PCI is similar in women and men.

1097-96**Treatment Bias Against Women With Acute Coronary Syndrome: Fact or Fantasy?**

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Background: Studies suggest women (W) with acute coronary syndrome (ACS) receive less aggressive therapy than men (M). This apparent bias may be due to pathophysiology where W have less obstructive epicardial disease on angiography & thus receive fewer coronary interventions.

Methods: We compared presentation, coronary anatomy, management & outcomes for 1724 consecutive ACS patients undergoing coronary angiography; defining normal/mild disease as <50% stenosis in any major epicardial vessel or bypass graft. We examined PCI/CABG rates, hospital/discharge therapy, & clinical outcomes using univariate statistics/ multiple regression.

Results: W were older, had more heart failure and hypertension, & lower tobacco use. Despite similar rates of enzyme release, M had higher rates of PCI or CABG. There were no significant gender differences in 6-month outcomes of death, MI, stroke, or re-hospitalization after adjustments for baseline characteristics.

Conclusions: