Cardiogenic shock was present in 33 (14.2%) LAD and 31 (13.7%) RCA patients (p = NS). Major angiographic (major dissection, no-reflow, perforation), and major clinical (abrupt closure, bypass surgery, death) events were reviewed.

Conclusions: Despite similarities in baseline patient demographics, PTCA of the RCA was associated with more procedural complications than PTCA of the LAD, but this did not worsen in-hospital outcomes. Conversely, PTCA of the LAD was associated with an increase in major in-hospital cardiac events, mostly secondary to the risk of death in the presence of cardiogenic shock. Therefore, when performing PTCA of the RCA, procedural details such as temporary pacing, defibrillation, intensive anticoagulation, and management of no-reflow need to be considered. In contrast, for PTCA of the LAD, procedural complications are rare, but case selection and shock significantly alter in-hospital outcome.

3:00

752-5 Prophylactic Intraaortic Balloon Pumping for Acute Myocardial Infarction Does Not Improve Left Ventricular Function

Cindy L. Grines, Bruce R. Brodie, John J. Griffin, Bryan C. Donohue, C. Costantini, Carlos Balestrini, Gregg Stone, Thomas P. Wharton, Jr., Lioudmila Mitina, Mariann Graham, Denise E. Jones, Debra Sachs, William W. O'Neill. *William Beaumont Hospital, Royal Oak, MI*

It has been suggested that the afterload reduction offered by intraaortic balloon counterpulsation (IABP) may improve left ventricular performance or affect remodeling after acute myocardial infarction. To investigate this issue, we randomized 437 high risk MI pts (age > 70, ejection fraction < 45%, 3 vessel disease, suboptimal PTCA, SVG occlusion, ventricular arrhythmias) to receive or not receive IABP for 48 hours after reperfusion with primary PTCA. Contrast left ventriculography was obtained acutely (prior to IABP) and repeated at 1 week. Radionuclide ventriculography was performed at 6 weeks.

Prophylactic IABP placement did not prevent hemodynamic deterioration as reflected by in-hospital sustained hypotension, CHF, pulmonary edema, need for vasopressors, or death. Furthermore, IABP did not influence global or regional LV function, as follows:

LV Function	IABP	No IABP	P
EF: acute	46%	49%	0.01
1 week improvement	1.4%	1.5%	NS
Infarct zone: acute	−2.5 SD/Chord	−2.5 SD/Chord	NS
1 week improvement	0.2 SD/Chord	0.3 SD/Chord	NS
EF: 6 week	48%	47%	NS

In conclusion, although IABP may be useful in *treating* hemodynamic problems with AMI, prophylactic placement for 48 hrs does not prevent hemodynamic deterioration or influence left ventricular regional or global systolic function.

3:15

752-6 Simultaneous Platelet Glycoprotein IIb/IIIa Integrin Blockade and Front-loaded Tissue Plasminogen Activator in Acute Myocardial Infarction: Results From a Randomized Trial

E. Magnus Ohman, Neal S. Kleiman, Gerald Gacioch, Seth Worley, J. David Talley, Frank I. Navetta, H. Vernon Anderson, Doug Spriggs, Michael Miller, Mark Cohen, Dean Kereiakes, Barry S. George, Kristina N. Sigmon, Mitchell Krucoff, Robert M. Califf, Eric J. Topol for the IMPACT-AMI Group. *Duke University, Durham, NC*

The platelet glycoprotein IIb/IIIa receptor blocker Integrelin in combination with accelerated tPA has been found to have a dose-dependent effect on *ex-vivo* platelet aggregation. To evaluate the outcomes in pts with acute myocardial infarction receiving tPA, Integrelin, heparin, and aspirin, a double-blind randomized trial was performed. After a dose-escalation phase an Integrelin dose of 180 ug/kg bolus followed by 0.75 ug/kg infusion was selected and was studied in 51 pts with 55 pts receiving placebo. Pts received a bolus within 10 mins of starting tPA and the infusion was continued for 24 hours. All pts had 90 minute angiography and 87 had 24-hour continuous ST segment monitoring. Pts allocated to Integrelin had similar rates of severe bleeding (4% vs 5%)) and blood transfusions (16% vs 18%) compared with placebo pts. Integrelin treated pts had a shorter time to steady state (66 vs 116 mins, p = 0.05), less recurrent ischemia (31% vs 50%, p = 0.13), and area under the ST curve during the first 6 hours (2868 vs 6670, p = 0.13) on ST monitoring.

Conclusion: Potent platelet aggregation blockade using Integrelin during thrombolysis may be an attractive strategy to improve reperfusion rates and reduce ischemia in acute myocardial infarction.

Outcomes	Integrelin	Placebo	
TIMI Grade 3	66%	39%	p = 0.006
Patency (TIMI grade 2 + 3)	87%	69%	p = 0.01
Death	7.8%	3.6%	
IC Bleed	2%	0	
Reinfarction	0	3.6%	
CHF/Pulm edema	9.8%	7.3%	

753 Angiographic and Clinical Predictors of Outcome After Device Intervention

Tuesday, March 26, 1996, 2:00 p.m.–3:30 p.m.
Orange County Convention Center, Room 314

2:00

753-1 A Meta-Analysis on the Clinical and Angiographic Outcomes of Stents vs PTCA in the Different Coronary Vessels in the Benestent-1 and Stress 1 and 2 Trials

Sheldon Goldberg, Aida J. Azar, Ferdinand Kiemenij, Peter de Jaegere, Richard Schatz, Donald Baim, Martin Leon, Patrick W. Serruys. *Cardialysis, Rotterdam; The Netherlands*

Both the Benestent and Stress 1 and 2 trials compared elective Palmaz-Schatz stent (S) vs balloon angioplasty (PTCA) in denovo lesions. These trials demonstrated that S improve the angiographic and clinical outcomes. To determine the impact of S vs PTCA in reducing the clinical and angiographic events, we analysed the data according to lesion location. The results were as follows:

	LAD PTCA (n = 293)	LAD S (n = 307)	RCA PTCA (n = 176)	RCA S (n = 151)	LCX PTCA (n = 54)	LCX S (n = 78)
Event	101 (34%)	75 (24%)	44 (25%)	25 (17%)	12 (22%)	16 (21%)
Acute gain	1.04	1.47	1.18	1.72	1.16	1.65
Late loss	0.45	0.72	0.32	0.64	0.33	0.70
Net gain	0.57	0.74	0.84	1.07	0.85	0.94
Restenosis	110 (43%)	74 (27%)	45 (32%)	30 (23%)	15 (32%)	18 (25%)
%DS FUP	48 ± 18	42 ± 19	42 ± 16	38 ± 16	41 ± 19	39 ± 19
MLD FUP	1.50	1.69	1.78	1.95	1.74	1.77

Event, dead/mi/cabg/ptca; restenosis, ≥ 50% diameter stenosis follow-up; mid, minimal lumen diameter; %DS, diameter stenosis at follow-up (FU).

In all vessels, S achieved a better acute gain, net gain and lower %DS as compared to PTCA. However, acute gain was the lowest in LAD, and therefore %DS post procedure the highest in LAD. Late loss was greater in the S irrespective of the vessel, with the highest late loss for the LAD. The restenosis rate was lower in S as compared to PTCA but nevertheless higher in the LAD. The event rate was lowest in the S patients as compared to PTCA patients, with the LAD yielding the highest event rate compared to RCA/LCX.

Conclusion: although S provide better angiographic and clinical outcomes compared to PTCA, the risk of events and restenosis is more pronounced in the LAD when compared to RCA/LCX.

2:15

753-2 Predictors of Late Mortality Following Ablative New-Device Angioplasty in Native Coronary Arteries

Simon R. Redwood, Jeffrey J. Popma, Kenneth M. Kent, Augusto D. Pichard, Lowell F. Satler, Gary S. Mintz, Mun K. Hong, Theresa A. Bucher, Alan J. Merritt, Martin B. Leon. *Washington Hospital Center Washington, DC*

We have previously reported that 'minor' CPK-MB elevation is associated with increased late mortality following ablative new-device angioplasty (NDA) in native coronaries. To determine the independent predictors and causes of late mortality following NDA, we examined the course of pts treated with directional atherectomy (n = 554 lesions), rotational atherectomy (n = 833) and excimer laser angioplasty (n = 510) between 1/90 and 2/94, followed for 353 ± 46 days. The overall incidence of late mortality was 2.2%. Pt- and lesion-related factors were examined using multivariate logistic regression analysis. Of all variables examined, only post-procedure acute renal failure (ARF) and CPK-MB elevation {minor: > 1 and ≤ 4X nml (ie., 5–16 ng/ml):, major > 4X nml (ie., ≥ 17 ng/ml)} were found to be independent predictors of late mortality. Specific NDA used was not an independent predictor.