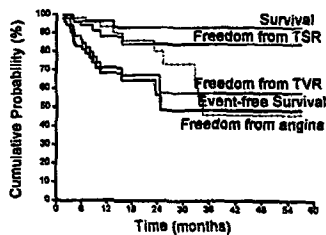


novo single vessel disease. However, the use of PSS for multivessel coronary disease has not been well defined. Between 1/18/90 and 1/3/95, 53 Pts (45 men and 8 women) underwent placement of 112 PSS (73 coronary and 39 biliary stents) in 107 vessels (two vessels in 52 Pts and 3 vessels in 1 pt). The mean age was 62 ± 11 years. The majority of Pts (66%) had both vessels treated during the same procedure, while 24% underwent staged (within 1 week) stenting and 20% had the 2nd vessel stented 7.6 \pm 9.3 months later. 32 Pts (60%) had HTN and 23 Pts (43%) had diabetes mellitus. 43 Pts (53%) presented with unstable angina, 11 Pts (21%) had a recent myocardial infarction and 41 pts (79%) had prior CABG. The vessels stented were the LAD (7%), LCX (6%), RCA (7%), and venous bypass grafts (80%). Stenting was successful in 52 Pts (98%). The mean pre-procedural % stenosis was 72 ± 37 and the mean post-procedural % stenosis was 2 ± 2 . No pt died in-hospital or had emergency CABG. 6 Pts (11%) had non-Q wave MI and 1 pt (2%) had a Q-wave MI. 17 Pts (32%) required blood transfusions and 8 Pts (15%) required femoral artery repair. There were no subacute stent thrombosis. Follow-up angiography was available in 25 Pts (47%) after a mean of 5.6 ± 2.5 months with an average % stenosis of 36 ± 30 . Angiographic restenosis (> 50% stenosis) of 1 or more stents was seen in 6 Pts (24%). At a mean follow-up of 15 ± 11 months, 3 Pts (5.7%) died, 3 Pts (5.7%) suffered MI. Revascularization (100% PTCA) was performed in 17 Pts (32%) after a mean of 12 ± 10 months (27% target vessel revascularization and 11% target lesion revascularization). The 2 year survival was estimated at 91% and the 2 year revascularization-free survival was 52%.



In conclusion, 1) Multivessel stenting can be accomplished with a high acute success rate and low procedural complications; 2) Despite multivessel CAD, no Pt required CABG during follow-up; 3) The restenosis rate was similar to that of single vessel stenting, and subsequent revascularization reflected progression of disease at non-stented sites.

9:45

772-6 Clinical Application of Transcatheter Endovascular Graft Placement for Aortic Aneurysm

Kanji Inoue, Mitsuru Sato, Shunichi Tamaki, Tomoyuki Iwase, Tatsuo Fujioka, Ario Yamazato, Shigeru Kubo, Yuki Yoshida, Htay Than¹, Masaru Tanaka¹. ¹ Takeda Hospital and Kyoto University Hospital, Kyoto, Japan

A new graft with a delivery system was developed to treat aortic aneurysm without surgery. The graft was constructed from Dacron cylinder, and the surface of the graft was supported by multiple rings of extra-flexible wire. After the graft was delivered to the predetermined target point through the sheath, the graft was allowed to expand by its own flexibility and then pressed to the vessel by balloon dilation. The delivery system was easy to use, flexible, and small. Even if the graft was released in an inappropriate position, the graft can be moved easily to the optimal position by a carrying wire. After five years of experimental studies, transcatheter endovascular graft placement using the graft was performed for 14 patients with aortic aneurysm. There were 13 men and one woman, aged from 21 to 85 years. The graft with the delivery system were successfully inserted percutaneously in 6 patients and through open arteriotomies in 8 patients under local anesthesia. There were aortic dissection in 4 patients, abdominal aortic aneurysm in 4, common iliac aneurysm in one, pseudo aneurysm in one, arteriovenous fistula in one, descending thoracic aneurysm in 2, aortic arch aneurysm in one. The graft including 2 bifurcated graft was successfully and uneventfully implanted in 13 patients. The technical failure occurred in one case. There was no procedure-related mortality. After the procedure, thrombosis of the aneurysm surrounding the graft was complete in 9 patients. The remaining 4 patients had either small proximal communication or distal communication. However, in these patients, aneurysm was gradually thrombosed in the most parts and have shown no evidence of enlargement during a mean follow up period of 4.5 months. There were no evidence of severe narrowing, migration, and distraction of the graft. Normal flow through the graft have been demonstrated up to now. Our early experiences demonstrated the efficacy and the safety of transcatheter endovascular graft placement using this new graft.

773 Management of Acute Myocardial Infarction

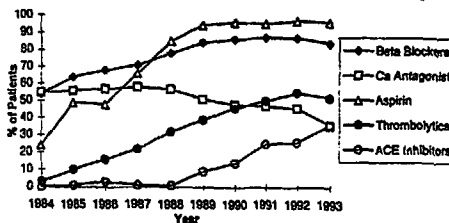
Wednesday, March 27, 1996, 8:30 a.m.—10:00 a.m.
Orange County Convention Center, Room 315

8:30

773-1 Ten Year Trends in Medical Management and Case Fatality in Acute Myocardial Infarction

K. Jamrozik, R. Broadhurst, R. W. Parsons, M. S. T. Hobbs, P. L. Thompson. Department of Cardiovascular Medicine, Sir Charles Gairdner Hospital and Department of Public Health, University of Western Australia, Perth — Australia

Previous studies have shown that patterns of management of acute myocardial infarction (AMI) can change quite rapidly. We correlated trends in management with trends in mortality. The following graph demonstrates the 10 year trends in medical management of acute myocardial infarction in a community wide study of 5121 patients aged 25–60 whose symptom onset was outside hospital and who were treated in a coronary unit.



There were dramatic uptrends in the use of aspirin and thrombolytic therapy and a steady rise in the use of beta-blockers, declining use of calcium channel blockers and anti-arrhythmic drugs and a recent increase in the use of ACE inhibitors.

In 1984/85 the 28 day case fatality was 8.6% declining to 4.6% in 1992/93 ($p < 0.001$). This represents an improvement of 40 lives saved in the month post-infarction per 1000 patients treated in coronary care units during the decade. This is in excess of any effect which could be attributed to a single intervention, and is consistent with a benefit from the combined changes in medical management.

8:45

773-2 Reperfusion Therapy After Pre-Hospital Cardiac Arrest and Its Influence on Outcome After Acute Myocardial Infarction

B. Fendley Stewart, W. Douglas Weaver, Lori S. Parsons, Jenny S. Martin, Nathan R. Every. University of Washington, Seattle, WA

In the MITI registry of patients (pts) with acute myocardial infarction (AMI), 599 (4.6%) of 12,984 pts had a cardiac arrest prior to hospital arrival. Twenty-six (4.4%) were in coma on admission. Thrombolytic therapy was given to 53 (8.8%) pts, none with coma. Direct PTCA was used in 59 (9.8%), including 3 pts with coma.

	Pre-hospital arrest and AMI			AMI w/no arrest n = 12,385
	1 st PTCA n = 59	thrombolysis n = 53	No Rx n = 487	
Age (mean)	59.5	58.5	67.2	66.1
Prior history (%)				
MI	10.2	19.9	24.7	20.9
Angina	20.3	20.8	24.7	33.1
CHF	5.1	1.9	19.1	11.3
Mortality (%)	24.1	13.5	58.2	9.9

The mortality in the 23 pts with coma who did not receive PTCA/thrombolytic therapy was 74%; 2 of 3 pts with coma treated by PTCA also died.

The mortality for patients with AMI who have been resuscitated from cardiac arrest is high. These findings suggest that aggressive reperfusion strategies should be pursued and their effectiveness studied, particularly in pts who are neurologically intact at the time of hospital admission.