

but with the number of lesions dilated and with a less effective initial dilation. Severe restenosis ( $\geq 70\%$ ) was an important driving force for additional procedures.

2:30

**712-3 The Impact of the Completeness of Revascularisation on Adverse Cardiac Events at 1 year Follow-Up in 1021 CABRI Patients**

Anno Breeman, Eric Boersma, Jaap W. Deckers, Patrick W. Serruys on behalf of the CABRI investigators. *University Hospital Rotterdam, The Netherlands*

**Background.** The Major Adverse Cardiac Events (MACE: death, myocardial infarction (MI), CABG and PTCA) at 1 year follow-up of the Coronary Angioplasty Bypass Revascularisation Investigation (CABRI) were previously reported. Overall results: no significant difference in survival and MI rate, but a significantly higher re-intervention rate in patients randomised to PTCA relative to CABG. We studied the effect of completeness of revascularisation on MACE at 1 year follow-up.

**Methods.** Patients randomised to PTCA, were divided in 4 groups: (I) complete revascularisation (procedural result: 0 vessel disease (VD),  $n = 154$ ), (II) nearly complete (1 VD,  $n = 210$ ), (III) nearly incomplete (2 VD,  $n = 75$ ) and (IV) incomplete revascularisation (2 or 3 VD unchanged,  $n = 94$ ). Kaplan-Meier event-free survival curves were calculated.

**Results.** One year results (%) and log-rank p-values are reported in table.

Event	I	II	III	IV	p-value
Death	95	97	95	96	0.8
Death, MI	92	94	93	90	0.4
Death, MI, CABG	87	84	75	59	0.0001
Death, MI, CABG, PTCA	69	64	47	49	0.0001

**Conclusion.** (1) The completeness of revascularisation was not predictive of survival or MI. (2) The re-intervention rate is a function of the (in)completeness of revascularisation.

2:45

**712-4 Comparative 5 Year Incidence of Ischemic Events for PTCA and CABG in the Bypass Angioplasty Revascularization Investigation (BARI)**

Bernard R. Chaitman, Leonard Schwartz, Gary S. Roubin, Bruce W. Lytle, Regina M. Hardison, George Sopko, David O. Williams, Richard S. Stack, Nicholas T. Kouchoukas, Mirle A. Kellett, and the BARI Investigators. *St. Louis University School of Medicine, St. Louis, MO*

The Bypass Angioplasty Revascularization Investigation (BARI) examined the hypothesis that an initial revascularization strategy of percutaneous transluminal coronary angioplasty (PTCA) compared to coronary artery bypass graft (CABG) surgery in pts with multivessel coronary disease does not compromise clinical outcome during 5 year follow-up. Between August, 1988 and August, 1991, 914 and 915 pts were randomly assigned to CABG or PTCA at 18 medical centers. Ascertainment of ischemic cardiac events were based on serial ECG analysis, cardiac enzyme data, clinical history, and classified at the St. Louis University Core laboratory. The events were classified as myocardial infarction (MI) if any of the following events occurred; (1.) a 2 grade Minnesota code Q-wave progression, (2.) new left bundle branch block with abnormal cardiac enzymes or (3.) abnormal cardiac enzymes and chest pain  $\geq 20$  minutes or worsening of ST-T wave abnormalities. Events were classified as ischemic but noninfarct if the above criteria were not met, cardiac enzymes were normal, and the pt had chest pain  $\geq 20$  minutes, required a hospital visit, and had the new occurrence of ST-T wave abnormalities. Kaplan Meyer estimates were used to determine the 5 year cardiac ischemia event-free survival rates in the PTCA and CABG groups. The rates were examined in a priori subgroups of unstable angina (69% of the population), severe chronic stable angina (16%), and mild or no angina but severe ischemia on noninvasive testing (15%). The rates were examined in pt subsets stratified by number of diseased vessels and left ventricular ejection fraction, and presence or absence of proximal left anterior descending stenosis  $\geq 50\%$ , hypertension, diabetes, and congestive heart failure. Results will be presented.

**712-5 Clinical Outcome and Costs of CABG and PTCA in the GABI Study Over 2 Years Follow-Up**

3:00

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In the German Angioplasty Bypass-Surgery Investigation (GABI) 359 patients (pts) with symptomatic multivessel disease (MVD) were randomized to CABG ( $n = 177$ ) and PTCA ( $n = 182$ ) during 1986 and 1991. There was no difference between the two treatment modalities with respect to the efficacy on angina pectoris relief at 1 and 2 years follow-up (7% vs. 10% CCS  $\geq 3$ ). However, reinterventions in PTCA pts were more frequent (44% vs 6%,  $p < 0.001$ ) and 21% pts crossed over to CABG during the first year. In the second year, the reintervention rate was only 4% (CABG) and 5% (PTCA). Initial and follow-up costs were compared according to the current price index. Procedural costs were calculated based on 50 pts undergoing MVD-CABG and 28 pts undergoing single or MVD PTCA. Costs of MVD-PTCA were \$8,200 (82% material, 13% personnel, 5% rooming) and of CABG \$19,200 (58% material, 37% personnel, 6% rooming). Averaged costs per patient during follow up:

	CABG (\$)	PTCA (\$)
1st hospitalization	19500	9900
6 months	19600	12600
1 year	19700	14600
2 years	20300	15500

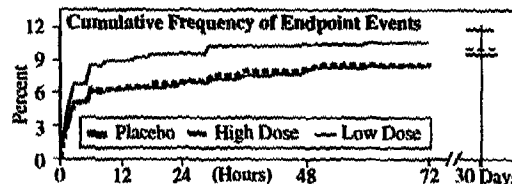
**Conclusions:** CABG and PTCA in MVD are equally effective in reducing angina over 2 years. Initial costs of PTCA are 49% lower. Due to reinterventions in the first year, costs increase to 76 % of CABG costs after 2 years.

3:15

**712-6 Maximal Benefit of Integrin Platelet IIb/IIIa Blockade 6-24 Hours After Thrombolysis: Results of the IMPACT-II Trial**

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The IMPACT-II trial compared high and low dose infusions of the peptide IIb/IIIa inhibitor Integrin with placebo in 4,010 patients undergoing coronary intervention. Integrin provides continuous antiplatelet effect for the duration of infusion (median 21 hours). The primary endpoint was a composite of death, infarction, and urgent re-intervention (PTCA, stent, bypass surgery) at 30 days; however, 76% of events occurred within 24 hours of entry. Kaplan-Meier analysis showed a maximal difference in endpoint frequency between placebo and Integrin groups occurring between 6 and 24 hours ( $P = 0.013$ ), and that its magnitude was reduced at 30 days ( $P = 0.063$ ). There was no difference in efficacy between high and low dose therapy.



Frequency of MI was reduced by up to 22% in the integrin-treated groups ( $P > 0.05$ ) at 30 days. Need for urgent re-intervention was significantly reduced as early as 3 hours (60% reduction;  $P < 0.02$ ) in patients receiving Integrin; these differences decreased to 30% (high dose) and 27% (low dose);  $P = 0.190$  and  $0.065$  respectively, by 30 days. After Integrin therapy, major reduction in ischemic events was observed within 24 hours of entry. Maximal benefit occurred early and was predominantly mediated by reduction in the incidence of myocardial infarction. This effect was somewhat diminished by the end of the initial follow-up period.

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