of 60 were followed up to August 1996 to evaluate the impact of estrogen therapy on target lesion revascularization. Estrogen therapy was continued throughout the follow-up (FU) period. Between the two groups, there was no significant difference in age, incidence of coronary risk factors (hypertension, diabetes mellitus, hypercholesterolemia and smoking), LV dysfunction, incidence of multivessel disease, lesion morphology, vessel site stented and number of stents per vessel or types of stent (Cook vs. JJIS). The long-term outcomes are as follows:

	Estrogen (n = 62)	No Estrogen (n = 55)	p Value
FU days	556 ± 264	516 ± 267	ns
Recurrent angina	2 (3%)	8 (15%)	0.04
Revascularization	12 (19%)	24 (44%)	0.0085
(PTCA and CABG) Death	0	1	ns

FU angiograms were obtained only in 26 out of 62 in estrogen treatment group with angiographic restenosis of 50% and 26 out of 55 in no estrogen treatment group with restenosis of 85%.

Conclusions: Estrogen replacement therapy in post menopausal women reduces angina and target lesion revascularization after intracoronary stenting. Further substantiation by large randomized studies is needed.

1059-144 Optimal Coronary Stenting in Diabetics: A Viable Percutaneous Alternative to Cardiac Surgery

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Diabetics have significantly higher rates of target vessel revascularization (TVR) compared with non-diabetics following percutaneous intervention. Earlier studies have reported TVR rates > 50% in diabetics despite use of intracoronary stents. Recent randomized studies have suggested that diabetics with multi-vessel coronary disease fare better with surgical revascularization. In the era of optimal coronary stenting, however, it may be possible to minimize the need for TVR in diabetics, thereby making percutaneous revascularization more attractive. We assessed 9 month TVR in 316 consecutive patients stented between 11/94 and 6/95, 81 of whom were diabetic. All stents were implanted using routine high pressure post-dilatations. Diabetes was a strong predictor of TVR, necessary in 24/81 (30%) diabetics vs. 36/234 (15%) non-diabetics, (p = 0.008). Recurrent angina prompted TVR in 57/60 (95%) of cases.

Conclusions: Diabetes increases the likelihood of need for TVR two-fold compared with non-diabetics. Despite this, use of optimal stenting technique can result in more acceptable restenosis rates compared with early stent experience in diabetics. Whether percutaneous revascularization employing optimal stenting technique compares favorably with surgery for diabetics with multi-vessel coronary disease requires further investigation.

1059-145 No Excess Mortality After Coronary Angioplasty in Diabetic Patients with Multivessel Disease after Prior Bypass Surgery

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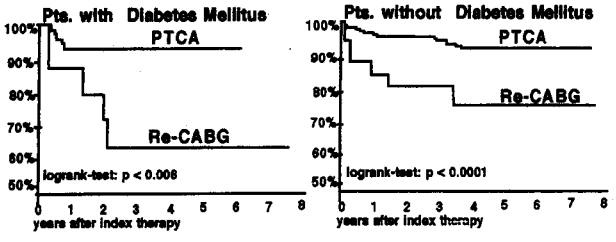
Recently an alert has been issued, that patients (pts) on drug treatment for diabetes mellitus with multivessel CAD should not be treated by PTCA because of increased mortality compared to coronary bypass surgery (CABG). We investigated, whether this also is relevant for pts with recurrent ischemia after prior CABG surgery.

n = 489 pts. (48.6 ± 44 months after CABG) were treated by PTCA (n = 438) or Re-CABG (n = 51). Diabetes was present in 99 pts (20.2%), (18.9% in PTCA; 31.4% in Re-CABG-groups, resp.). During follow-up of 32.0 ± 25.2 months, 44 pts. died (30 in PTCA-group, 14 in Re-CABG-group). 3-yr-Mortality was 37.4% in diabetic pts. in Re-CABG-group, 25.7% in non-diabetics in Re-CABG-group, 7.2% in diabetics in PTCA-group and 7.4% in non-diabetics in PTCA-group. Cox hazard analysis identified diabetes as risk factor for death with × 1.43 rel. risk (p < 0.007) in all patients. Survival curves:



Conclusions: In this series, redo bypass surgery resulted in higher death rates than angioplasty for diabetic patients as well as for non-diabetic patients. Nevertheless, irrespective of treatment regimen, diabetes is a risk factor for fatal adverse cardiac events at follow-up.

1059-146 Coronary Stenting in the Diabetic Patients: Early and Follow-up Results

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Balloon PTCA in diabetic (D) patients (pts) has been associated with less favorable outcomes due to their increased incidence of restenosis and progression of disease. To assess whether Palmaz-Schatz (PS) stent is a useful alternative to balloon PTCA in D, immediate and follow-up (FU) results were analyzed in consecutive 931 pts received PS implantation and compared D pts with none-diabetic (ND) pts. Clinical success was defined as < 50% residual stenosis without death, CABG, Q-wave MI. FU quantitative angiography was obtained from 819 pts (88%) after 6 months or earlier when indicated by symptoms. Clinical FU data was obtained after 12 months. Event-free survival was defined as free from death, MI, CABG, target and new lesion PTCA at FU.

	D (N = 263)	ND (N = 668)
Multi Vessel*/Poor LV* (%)	69/18	57/12
Calcification (%)/LL (mm)	24/12.5	18/11.8
Reference diameter (mm)	3.24 ± 0.65	3.23 ± 0.64
Pre MLD (mm)	0.78 ± 0.46	0.76 ± 0.47
Post MLD (mm)	2.86 ± 0.50	2.88 ± 0.49
Clinical Success (%)	97	95
Death/MI/CABG (%)	0.4/1.1/0.4	2.3/1.5/1.2
Thrombosis (%)	0.8	1.8
Bleeding complication (%)	4.6	4.9
FU MLD* (mm)	1.93 ± 0.91	2.06 ± 0.82
Binary restenosis*/TLR (%)	29/19	22/15
Event Free Survival (%)	32	27

*p < 0.05, MLD = minimal lumen diameter, LL = lesion length

Conclusion: 1) PS stent implantation can be performed in D pts with the acceptable complications despite unfavorable clinical environment. 2) But restenosis following stenting in D is significantly higher because of greater late loss, probably reflecting more aggressive intimal hyperplasia.

1059-147 Coronary Stenting During Emergency Angioplasty in High-Risk Myocardial Infarction: Data From a Multicenter Registry

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Use of coronary stents (CS) during emergency angioplasty (EM-PTCA) in acute myocardial infarction (AMI) is controversial. The 1-year RAI registry was started in November '95 to monitor the performance, in-hospital and 6-month outcome, and resource use of EM-PTCA in high-risk AMI (large anterior or inferior, recurrent, post CABG, with pump failure), in 6 Centers where EM-PTCA is currently performed. In the 1st semester PTCA was attempted in 135 pts, with use of CS in 68 pts (50%): 6 women, age 56 ± 10 (29–79 y). Five pts had failed iv lysis, and 9 (13%) were in shock. CS were implanted immediately after PTCA in all cases: the indication was a threatening dissection or unsatisfactory balloon result in 55 pts, and elective in 13 (19%). Vessel distribution was as follows: 36 LAD (53%), 23 RCA, 4 Cx/OM, and 5 SVG. IABP was used in 15 pts (22%) Immediate success was achieved in 67 pts (99%), with balloons of 3.4 ± 0.3 mm at 15 ± 2 atm. Multiple CS were used in 14 pts. (21%). Final flow was TIMI 3 and 2 in 65 and 3 cases, respectively, and residual stenosis was 12 ± 4%.; pain was absent in 60 pts, with a normal ST segment in 32 (47%). During hospital stay (10 ± 4 d; 5–24) 6 pts (9%) had subacute CS occlusion (with redo PTCA in 3, and CABG in 2), 2 pts had vascular repair, and 5 pts (7%) died, due to persistent shock in 3. Medication at discharge (61 pts) included ticlopidine alone in 40 pts (66%), aspirin alone in 7 pts, both in 8 pts, and anticoagulants in 6 pts. Follow-up angiographic results in this cohort will be available in Nov. '96. *In conclusion:* CS may increase the immediate success of EM-PTCA in the compromised pt with high-risk AMI, with few complications.