mm is associated with a high rate of recurrence and reintervention. The influence of coronary stenting on the clinical outcome in patients (pts) with ECL ≥30 mm remains debated.

Methods: Between May 1995 and May 1997, 186 pts, 152 males and 34 females, mean age 65 ± 5 years (range 33–88 years), of whom 42% presented unstable angina and 79% had multivessel disease, underwent coronary stenting of ECL ≥30 mm (mean length lesion 35.5 ± 5 mm, range 30–90 mm). Lesion characteristics included eccentricity (82%), side branch inclusion (38%), bend location (32%), calcification (32%), or total occlusion (10%). All pts received aspirin (250 mg o.d.) and ticlopidine (250 mg b.i.d.) initiated 48 h before the procedure. Intravascular ultrasound was not used during the procedure. Stent deployment was performed with high pressure balloon inflation (mean 14.5 ± 2.5 atmospheres).

Results: Two-hundred-thirty-nine stents (1.3/pt, 1.1/lesion), Wallstent (42%), Gianturco-Roubin II (40%), Nir (8%), Palmaz-Schatz (6%), miscellaneous (4%) were implanted in RCA (38%), LAD (33%), grafts (18%) or LCx (11%). Stent deployment was successfull in 99.5%. On-line post-procedural quantitative coronary analysis showed: final mean stent diameter = 3.5 ± 0.5 mm (range 2.5–5.5 mm) and mean length stent = 41 ± 10 mm (30–70 mm). Final stent diameter ≥3 mm was achieved in 81.7% of cases. In-hospital major cardiac events included two deaths (1.1%) (one subacute thrombosis and one ventricular fibrillation), 3 nonfatal MI (1.65%) and one emergency CABG (0.55%) (extensive dissection). Clinical follow-up (3–27 months), obtained in 160/184 pts (91%), revealed 4 cardiac deaths (2.4%), 2 nonfatal MI (1.2%) and 50 recurrent angina (31%) with target lesion revascularization in 22 cases (13.6%) including PTCA in 20 pts and CABG in 2. Three pts underwent PTCA on other lesions.

Conclusion: Stenting of coronary lesions ≥30 mm resulted in high procedural success and low immediate complications rate. Mid-term results included a relative high rate of recurrent angina and target lesion revascularization.

1112-82 "Slow Flow" Following Aortocoronary Vein Graft. Stenting: Incidence, Predictors and Procedural Implications

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Background: Embolization of atheromatous debris following PTCA and stenting of coronary vein graft lesions can result in "slow flow" attributable microvascular obstruction. Our objectives were to determine the incidence and clinical predictors of "slow flow" following vein graft stenting and to identify technical factors of the stent procedure related to "slow flow."

Methods: Medical records and coronary angiograms of 49 consecutive patients (pts) undergoing stenting for one or more vein graft lesions were reviewed. Treated lesions were characterized quantitatively and qualitatively by an angiographic core laboratory. "Slow flow" was defined as ≤ TIMI 2 with ≤ 50% lesion narrowing.

Results: "Slow flow" was observed in 11/49 pts (22%). Univariate analysis comparing "slow flow" to "non-slow flow" pts revealed no differences in regard to pt age, gender, coronary risk factors, graft age, recipient artery, presence of thrombus, ulceration, angulation, multiple lesions, calcification, lesion location in graft, class, asymmetry or dissection, severity before or after stenting, reference diameter or initial TIMI flow grade. "Slow flow" was most commonly observed after the pre-stent balloon deflation (6/11 pts) but was also seen immediately after stent deployment (3/11) and after high-pressure balloon deflation (2/11).

Conclusions: "Slow flow" occurred in 22% of stented vein grafts and could not be predicted by any baseline feature. Although "slow flow" was observed during each phase of stenting, it was most common after the pre-stent balloon deflation. Treatments to avoid "slow flow" during in vein graft stenting should be administered at procedure outset.

1112-83 Delayed Time Course of Target Lesion Revascularization Following Saphenous Vein Graft Angioplasty

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Background: Target lesion revascularization (TLR) after successful native coronary angioplasty usually occurs within first 6–9 mos. Time course of TLR following successful saphenous vein graft (SVG) angioplasty may be different.

Methods: We followed 1267 pts with 1590 SVG lesions successfully treated with angioplasty for at least 1 year. Among them, 150 pts (66 ± 10 yrs, 83% with unstable angina, 40% with diabetes) with 241 lesions (55% treated with stents; SVG age = 97 ± 58 months, 35% ostial, 21% degenerated) had TLR.

Results: The cumulative occurrence of TLR over time is as follows:

	6 months	9 months	12 months	24 months
TLR	54%	69%	78%	88%

The steepest rise in TLR occurred up to 8 months (TLR rate = −1.2 ± 0.307 × Time; $r^2 = 0.99$), after which there was still continued attrition, albeit at a slower rate (TLR rate = 70.7 ± 0.019 × Time; $r^2 = 0.80$). Patients with TLR <8 months had lower EF (40 ± 13% vs 46 ± 12%, p < 0.05), more ostial location (41% vs 28%, p = 0.08), and smaller reference vessel size (3.1 ± 0.5 mm vs 3.3 ± 0.6 mm, p < 0.01).

Conclusion: The time course of TLR following successful SVG angioplasty appears prolonged, with only 54% occurring within the first 6 months and continued TLR even after 1 year.

1112-84 Immediate and Long Term Outcome After Transcatheter Interventions in Patients After Coronary Bypass Surgery

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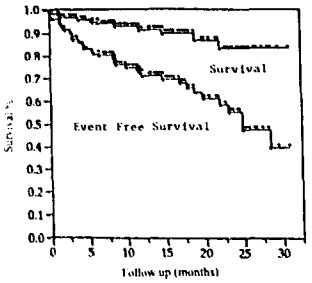
Since redo CABG is associated with a higher morbidity and mortality, percutaneous revascularization is an attractive alternative. We report the short and long term clinical outcomes of 135 pts (174 lesions) undergoing percutaneous graft revascularization. There were 106 males, the mean age was 68 ± 9, 39% were diabetics, 61% had prior MI and 32% had a prior intervention. One hundred and twenty eight (95%) patients presented with an acute coronary syndrome. The mean age of grafts was 9 ± 4 years. While conventional PTCA was used in 17.8% of the cases, stenting was used in 83%. Immediate success rate was 95.4% (TIMI 3 flow: 93%). During hospitalization, abrupt closure occurred in 1 patient (0.7%), death in 4 pts (2.9%), post-procedure NQMI in 22 pts (16.3%), emergency redo CABG in 1 patient (0.7%) At mean follow up of 20 ± 1 months there were 12 (8.8%) deaths, 2 MI (1.5%), 18 (13.3%), target vessel revascularization and 9 (6.7%) redo CABG. By Kaplan-Meier estimates survival and event-free survival was 86 and 62% respectively.



Conclusion: Despite the fact that graft interventions are associated with initial high success rate the long term outcome is limited by the increased number of revascularization procedures.

1112-85 Elective GR II™ Stenting in Small Vessels: Multicenter Results

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A multicenter U.S. registry study was designed to evaluate elective stenting using the GR II™ stent in small vessels (diameter ≥2.1 mm and ≤3.0 mm) with lesions ≤30 mm long. Demographics: 262 patients, 64% male, 30% diabetic, 45% high cholesterol, 65% multivessel disease, 38% prior MI, 22% prior CABG. Lesions: reference vessel diameter 2.6 ± 0.3 mm (45% ≤ 2.5 mm), lesion length 14 ± 8 mm (39% ≥15 mm), diameter stenosis 75 ± 21%, 62% class B2 and C, 44% diffuse disease, 29% moderate/severe proximal tortuosity.

Results: Stents (20 or 40 mm long) were successfully implanted in 258 patients (98.5%, 1.4 stents/lesion); average residual stenosis was 2 ± 2%. Post-procedure, patients received ticlopidine and aspirin. Acute thrombosis (<24 hours) occurred in 1.6%, subacute thrombosis in 2.4%. Cardiac events are shown in the table. Multivariate predictors of TLR at 31–180 days included female gender (p = 0.05) and number of stents (p = 0.07).