Background: Percutaneous intervention for ostial coronary disease remains a therapeutic challenge with a trend towards more restenosis. Vascular brachytherapy (VBT) is the only proven therapy for in-stent restenosis (ISR). Methods: We sought to evaluate the efficacy of VBT for ostial ISR based on data extracted from the largest registry on beta VBT using the Betactag system (Novoste, Norcross, USA).

Results: Out of 878 pts treated by VBT for ISR, 47 presented with ostial ISR. Baseline demographic data were balanced between both groups except for vessel size and mean dose (3.16±0.50mm (all, Group 1) vs 3.33±0.52mm (ostial, Group 2), p=0.05). In particular, in Group 2, vessel type was the left main (10%), the LAD (24%), the Lcx (24%), respectively, p=NS. There was no difference in mean stent diameter (3.16±0.50mm (all, Group 1) vs 3.33±0.52mm (ostial, Group 2), p=0.05). In particular, in Group 2, vessel type was the left main (10%), the LAD (24%), the Lcx (24%), respectively, p=NS. There was no difference in mean stent diameter (3.16±0.50mm (all, Group 1) vs 3.33±0.52mm (ostial, Group 2), p=0.05).

Conclusions: VBT seems feasible and efficacious in reducing recurrent ISR. However, potentially because of technical issues, the MI rate is higher during intervention than in a general ISR population. Consequently, at 6 months follow-up, mortality is also higher.

POSTER SESSION

1081 Coronary Stenting: Complex Patients

Monday, March 08, 2004, Noon-2:00 p.m.
Morial Convention Center, Hall G
Presentation Hour: 1:00 p.m.-2:00 p.m.

T081-47 The Benefit of Coronary Stenting in Small Vessels is Dependent on Reference Vessel Diameter: Results From a Meta-Analysis of 11 Randomized Trials
Paul Moreno, Cristina Fernandez, Rosana Hernandez-Antolin, Maria J. Perez-Vicuyano, Fernando Alleno, Javier Escaned, Manel Sabate, Camino Bañuelos, Carlos Macaya, Hospital Clinicino San Carlos, Madrid, Spain
Background: The benefit of coronary stenting (CS) in small vessels is still under debate, since results from randomized studies have yielded controversial results. The aim of this study was to evaluate the influence of reference vessel diameter (RVD) on the effect of CS in restenosis in small vessels.

Methods: A meta-analysis including eleven randomized trials on CS versus balloon angioplasty (BA) in small (<3mm) vessels was performed. A lineal regression equation was used to evaluate the association between mean RVD and the benefit of CS (RR for restenosis).

Results: Overall, 3,541 patients were included (1,672 allocated to BA and 1,869 to CS). Of them, 2,977 (84%) had angiographic re-evaluation at 6 months. RVD at baseline was similar in patients allocated to BA and CS (2.35 vs. 2.36 mm, p=NS). The pooled restenosis rate was 25.8% and 34.2% in patients allocated to CS and BA, respectively (p=0.001; risk ratio 0.75; 95% confidence interval 0.67-0.84; absolute risk reduction 0.07, 95% CI 0.02-0.13, p=0.005). A smaller RVD at baseline was associated with higher risk of restenosis (y = -3.551 + 1.826*x, p=0.012) (see figure).

Conclusion: Larger vessels (RVD > 2.5 mm) are less prone to restenosis when treated with CS. It suggests that CS is not only an alternative to BA in small vessels but could be the treatment of choice in larger vessels.

T081-48 Latin America Small Vessel Randomized Study in Diabetic Patients (LASMAL II): Clinical and Angiographic Follow-Up Data
Background: There are several randomized studies comparing stent vs PTCA in patients (pts) with small vessel reference size, however, at our knowledge there were no randomized comparison in diabetes between PTCA and stents in a population with small vessel reference size.

Methods: From February 2001 to July 2003, 220 diabetic pts presenting severe lesion in small or native coronary artery (<2.9 mm) and clinical indication of myocardial revascularization were included in this study. In 9 Latin America centers, pts were randomized to an initial strategy with PTCA (109) or elective stent therapy (111). A coated polypropylene 9 mm small vessel stent (Abbott-BiodivYsio Sy) was used in stent arm, lesions in stent group were always treated previously with conventional balloon technique. The end point of the study was to compare angiographic binary restenosis, minimal luminal diameter, gain, net target vessel revascularization (TVR), target vessel failure (TVF) and major adverse cardiovascular events (MACE) at six month of follow up between both revascularization strategies.

Results: Both groups had similar baseline, clinical demographic and angiographic characteristics (Diabetes type II in 92%). After randomization in PTCA group, 24% of the pts crossed over to stent during the initial period. A bolus and 12 hours infusion of abciximab was given in 41% of pts in both groups. Hospital and 30 days outcome were similar in PTCA and stent group (MACE 11% vs 7% respectively vs=NS). Long term clinical follow up (12.6±8 months) was obtained in 98% of the pts. Six months follow up angiogram was available in 73% of them. There were no significant differences in TVR (PTCA 15.6% vs Stent 14.4% p=NS) or incidence of MACE (PTCA 22.3% vs Stent 18% p=NS) between both groups whereas TVF (PTCA 34% vs Stent 28.5% p=0.04) and net gain (PTCA 0.74mm vs Stent 0.94mm p=0.008) were significantly better with stent therapy. Conclusions: This multi-center randomized study demonstrated that an initial strategy with a small vessel stent design in diabetic pts had a long term follow up lower angiographic restenosis, TVF and better net gain than those initially treated with PTCA.

T081-49 T-Stenting of Bifurcation Lesions Is Associated With a High Incidence of Stent Thrombosis
Francisco Gobeil, Chantal Tremblay, Francois Reeves, Guy Lecron, Roger-Marie Gagnon, Alain Rivard, Stephanie Rinfret, Notre-Dame Hospital, CHUM, Montreal, PQ, Canada
Background: Bifurcation treatment remains a technical challenge. Stenting of both main and side branches is associated with good acute angiographic result, but it's impact on the risk of stent thrombosis is unknown.

Methods: Between 12/2001 and 01/2003, a total of 96 patients underwent stenting of a bifurcation lesion at our institution. Baseline and procedure-related data were prospectively collected.

Results: Acute coronary syndrome was the indication for PCI in 88% of patients. Most lesions involved the LAD-diagonal bifurcation (54%). In 20 patients (21%), 2 stents (2S) were used (T-stenting), mostly because a residual lesion in the side branch. In the remaining patients, only one stent (1S) was used. Baseline demographic data were balanced between both groups. Clopidogrel pre-treatment and use of illibilia inhibitors was similar. There was no difference in mean stent diameter (3.1±0.3 mm vs 3.1±0.4 mm, 2S vs 1S) and length (20±6 mm vs 18±6 mm) implanted in the main and side branches. Mean stent diameter and length in the side branch (group 2S) was 2.6±0.4 mm and 12±2.4 mm respectively. Final kissing balloon inflation was performed in the majority (89% vs 77%, 2S vs 1S, p=0.45). Side branch residual stenosis (RS) was significantly lower in the 2S group (4±8% vs 19±15%, p<0.001). However, angiographic success (RS<30% with stent, RS<50% without stent, and TIMI

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