

collagen plug was placed intravascular, surgical repair because of haematomas was needed once in the VS group and twice in the AS group respectively. There were no significant difference between the two devices in terms of total complications.

Conclusion: The application of collagen based VCD after PCI does not increase the rate of complications and can be safely and effectively performed. The complication rates are equivalent to previously published rates with manual compression.

1046-167 Incidence and Predictors of Left Ventricular Dysfunction in Patients With Takayasu or Giant Cell Aortitis

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Background: Left ventricular dysfunction (LVD) in patients with aortitis has been described in few studies. The incidence and predictors of LVD in patients with angiographically confirmed Takayasu or Giant Cell aortitis (TA/GCA) is not known.

Methods: We identified 87 patients with angiographically confirmed TA/GCA. All patients underwent transthoracic echocardiographic studies that were subsequently reviewed in a blinded fashion. LVD was defined as an ejection fraction (LVEF) less than 50%.

Results: The study population was 84 % Caucasian (73/87), 91 % female (79/87), and had a mean age of disease onset of 30 years. The average LVEF was 56.5 % (n=87). The average time between symptom onset and diagnosis was 40 months, and the average time between symptom onset and echocardiography was 81 months. Of the 87 patients, 19.5% (17) had an LVEF less than 50 % (mean of 37 % +/- 7.9 %). LVD was present in 43 % (10/23) of patients with versus 11 % (7/64) of patients without aortic arch involvement (p = 0.0017). LVD was found in 27 % (12/44) of patients with versus 12 % (5/43) of patients without descending aortic involvement (p=0.07). Aortic regurgitation was present in 76 % (13/17) of patients with versus 36 % (25/70) of patients without LVD (p=0.002). Patients with LVD had a median of 2 (range 1-4) involved aortic segments compared to a median of 1 (range 1-4) among those without LVD (p=0.008). The following factors were not associated with the presence of LVD: aortic thickness, the number of involved extra-aortic vessels, aneurysm, hypertension, diabetes, tobacco use, sedimentation rate, leukocyte count, hemoglobin, retinopathy, and progressive course of arteritis. **Conclusion:** In TA/GCA with aortitis, LVD was associated with aortic regurgitation, aortic arch involvement, and with the greater extent of aortic involvement. Descending aortic arch involvement was associated with LVD with borderline significance. These data suggest that hemodynamic and immunologic factors both contribute to LVD in this population.

1046-168 Global Renal Revascularization Preserves Renal Function in Diabetic and Nondiabetic Patients With Renal Insufficiency

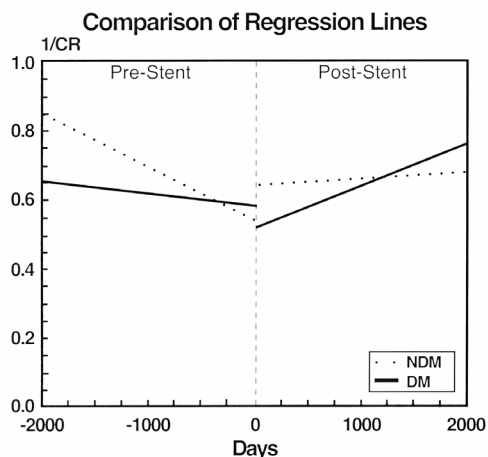
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Background: Patients with diabetes and ischemic nephropathy progress to end stage renal disease at a faster rate compared to non-diabetic patients. Whether diabetic patients (DM) obtain similar benefits in renal function preservation as non-diabetic patients (NDM) with renal artery stenting is unknown.

Methods: The renal function of 46 consecutive patients with bilateral renal stenosis or solitary renal artery stenosis (13 DM; 33 NDM) and renal insufficiency (serum creatinine 1.5 to 4.0mg/dl) were analyzed for blood pressure, number of medications, and by constructing the pre and Post procedures 1/creatinine over time slopes for all patients.

Results: All patients had deterioration of renal function prior to intervention. At a mean follow-up of 23 months post intervention, the slope of reciprocal of creatinine over time showed improvement in both groups. (Figure)

Conclusion: Renal artery stenting is equally beneficial in preservation of renal function in DM and NDM patients with impaired renal function and atherosclerotic global renal artery stenosis.



1046-169

Renal Artery Stenting for Blood Pressure Control Is Equally Effective in Unilateral and Bilateral Renal Artery Stenosis

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Introduction: Hypervolemia is the pathophysiology of bilateral renal artery stenosis (RAS) while hyper-reninemia is the pathophysiology of unilateral RAS in patients with renovascular hypertension. It is not known if bilateral stenting for bilateral RAS is similar to unilateral stenting for unilateral RAS.

Methods: We reviewed the blood pressure (BP) at baseline and one month in 176 consecutive patients: after unilateral stenting in 110 patients with unilateral RAS and bilateral stenting in 66 patients with bilateral RAS. All treated arteries had > 50% atherosclerotic stenosis by angiography. All patients had uncontrolled hypertension despite therapy with two or more BP medications. Patients with a solitary (single) kidney, on dialysis, or kidney transplant were excluded.

Results: BP, renal function, and demographics were similar at baseline. One month following renal intervention, both groups demonstrated similar improvement in BP (see table. Note: *p < 0.0001, †p=0.017 compared to baseline).

Conclusion: The BP response after renal stent placement is significant and similar in magnitude in patients with bilateral vs. unilateral RAS.

	Unilateral Baseline (n=110)	Unilateral Follow-up (n=110)	Bilateral Baseline (n=66)	Bilateral Follow-up (n=66)
SBP, mmHg	169±28	147±23*	172±32	148±26*
DBP, mmHg	87±15	77±13*	87±15	77±13*
Mean BP mmHg	114±17	100±14*	115±19	101±16*
Number of BP Meds	2.43±0.97	2.10±0.86†	2.28±1.26	1.94±1.14

1046-170 Surgical Treatment of Ascending Aortic Aneurysms in Patients With Giant Cell Aortitis

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Background: Giant cell aortitis (GCA) is a rare cause of an ascending aortic aneurysm. We present an 8 year experience with surgical repair.

Methods: 37 pt (29:8M, age 69.6+/-9.5 years) were operated from 1995-2002. 27%(10) had a history of steroid treatment for temporal arteritis or polymyalgia rheumatica, 8.9+/-3.9 years prior. 51%(19) patients had +3-+4 aortic regurgitation. Maximal aneurysm size was 6.1+/-0.8 cm. 81%(30) underwent replacement of the ascending aorta, 11%(4) had a modified Bentall procedure, 5%(2) had a valve-sparing root reconstruction, and 3%(1) had aortorrhaphy. 59(22) required 22+/-9 minutes of hypothermic circulatory arrest for hemi or complete aortic arch repair. 70%(26) pt had concomitant procedures.

Results: There was no early mortality. Morbidity was re-exploration for bleeding in 8%(3), stroke in 8% (3), left vocal cord paralysis in 5%(2), renal failure in 5%(2), and GI bleed in 3%(1). 32%(19) received postoperative steroid therapy. Mean follow-up was 2.8+/-2.3 years. 4-year survival was 74% (95%CI 57-94). Other descending and/or abdominal aortic or great vessel aneurysms occurred in 46%(17). 4 had prior aneurysm surgery, 8 were followed with aneurysms, and 5 underwent repair of an aneurysm in the follow-up period. Of 8 late deaths, 3 were caused by complications of a descending thoracic aneurysm.

Conclusions: Ascending aortic aneurysms caused by GCA can involve the aorta from the aortic root through the aortic arch. A tailored operative intervention can be done with low morbidity and mortality. Other aneurysms of the aorta and great vessels occur in nearly one-half of patients. Frequent surveillance of the remaining aorta is mandatory.

1046-171

Preoperative Statins Are Associated With Shorter Length of Stay and Improved Long Term Survival in Patients Undergoing Vascular Surgery

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Background: Patients (pts) undergoing vascular surgery are at risk for perioperative cardiovascular (CV) complications. Preoperative statin therapy has recently been associated with decreased perioperative mortality in pts undergoing vascular surgery. Our goal was to study the effect of preoperative statin therapy on perioperative morbidity, length of stay (LOS), and long-term survival in pts undergoing vascular surgery. **Methods:** We retrospectively reviewed 561 consecutive infra-inguinal vascular surgeries on 446 pts between 1995-2001. Preoperative statin and beta-blocker use, comorbidities, perioperative events, and LOS were noted. Long-term survival was assessed using the Social Security Death Index (SSDI). **Results:** Preoperative statins and beta-blockers were used in 16% and 23% of surgeries, respectively. Baseline comorbidities included: CAD (59%), CABG (19%), DM (54%), prior stroke (CVA) (5%), smoking (55%), HTN (76%), COPD (8%), and ESRD (18%). Perioperative events included 30-day death (2.9%), 30-day CV death (2.0%), MI (5.2%), CVA (0.9%), and major vascular events (13.4%). Statin therapy was associated with a shorter LOS (6.4 vs 9.7 days, p<0.0001), while beta-blocker therapy was not. Multivariate analysis models, adjusting for multiple surgeries within pts, and controlling for comorbidities, age, and operative year, were employed. Independent predictors of shorter LOS were statin therapy (p=.008), absence of ESRD (p= 0.01), and later operative year (p=0.02). Beta-blocker therapy was associated with fewer MI's (p=0.02), and fewer combined CV death, MI and CVA (p=0.04). Statin therapy was associated with trends towards fewer MIs (p=0.09), and fewer combined death, MI, and CVA