ABSTRACTS - Angiography & Interventional Cardiology 19A

1052-176 Accelerated Transplant Vasculopathy Portends Proliferative Restenosis After Percutaneous Coronary Intervention in Cardiac Transplant Patients

John C. Wang, Satyendra Giri, James C. Fang, Gilbert H. Mudge, Campbell Rogers, Brigham & Women's Hospital, Boston, MA

Background: Allograft vasculopathy (AV) after cardiac transplant (TX) causes diffuse concentric narrowing. Percutaneous intervention (PCI) is widely used in treating AV. We evaluated 1-year clinical and quantitative angiographic (QCA) results of PCI in TX pts.

Methods: 432 pts underwent TX at Brigham & Women's Hospital from Feb 1984 to Aug 2001. Of these, 24 (92% male, mean age 55 yrs) underwent PCI of 49 lesions. Core-lab QCA determined % diameter stenosis (DS), reference (RD) and minimal lumen (MLD) diameters.

Results: Procedural success was 98.0%. Of 24 pts, 5 (21%) died within 1-year of PCI. QCA of 24 PCI lesions in 14 pts (74%) with 1-year follow up revealed pre-procedure: (HLD 2.46 ± 0.25mm, MLD 2.23 ± 0.18mm, % DS 85 ± 9.6%, acute gain 1.86 ± 0.47mm). One year follow up showed: (HLD 2.59 ± 0.22mm, MLD 2.12 ± 0.30mm, % DS 52 ± 29.6%). A Late Loss (LL) of 1.02 ± 0.82mm and loss index of 0.5 ± 0.43. Restenosis (DS ≥ 50%) occurred in 11 (46%) lesions. Seventeen matched AV lesions (DS 28 ± 11.4%) at a non-PCI site had a LL of 0.66 ± 0.36mm. Pts with restenosis also had greater LL at the non-intervened matched site than patients without restenosis (0.84 ± 0.36mm vs 0.40 ± 0.16mm, p < 0.003). Patient-specific LLC at PCI and non-PCI sites correlated significantly (r = 0.65, p < 0.001, figure).

Conclusions: PCI in TX pts has high procedural success rates. Restenosis rates are high in pts with rapid progression of AV suggesting common mechanisms.

1052-179 Stenting of de-Novo Lesions on Unprotected Left Main Coronary Artery: Results of a Five-Year Follow-Up Period

Jürgen Pache, Kambiz Rahbar, Julinda Mehilli, Josef Dirschner, Joera Hausleiter, Helmut Schulte-Hillen, Hubert Bodek, Adrian Kastrati, 1. Medizinische Klinik rechts der Isar, Munich, Germany, Deutsches Herzzentrum Muhenhein, Munich, Germany

Background: Surgical revascularization is the standard procedure in patients (pts) with unprotected left main disease (LMD). However, the increase use of stents, the improved success of PCI, our results in the same category of patients reinforce the need of randomized clinical trials comparing bypass surgery with stenting in patients with left main disease.

Methods: From our clinical and intravascular ultrasound (IVUS) core laboratory data- sets, 24 (92% male, mean age 55 yrs) underwent PCI of 49 lesions. Core-lab QCA determined % diameter stenosis (DS), reference (RD) and minimal lumen (MLD) diameters. Results: Procedural success was 98.0%. Of 24 pts, 5 (21%) died within 1-year of PCI. QCA of 24 PCI lesions in 14 pts (74%) with 1-year follow up revealed pre-procedure: (HLD 2.46 ± 0.25mm, MLD 2.23 ± 0.18mm, % DS 85 ± 9.6%, acute gain 1.86 ± 0.47mm). One year follow up showed: (HLD 2.59 ± 0.22mm, MLD 2.12 ± 0.30mm, % DS 52 ± 29.6%). A Late Loss (LL) of 1.02 ± 0.82mm and loss index of 0.5 ± 0.43. Restenosis (DS ≥ 50%) occurred in 11 (46%) lesions. Seventeen matched AV lesions (DS 28 ± 11.4%) at a non-PCI site had a LL of 0.66 ± 0.36mm. Pts with restenosis also had greater LL at the non-intervened matched site than patients without restenosis (0.84 ± 0.36mm vs 0.40 ± 0.16mm, p < 0.003). Patient-specific LLC at PCI and non-PCI sites correlated significantly (r = 0.65, p < 0.001, figure).

Conclusions: PCI in TX pts has high procedural success rates. Restenosis rates are high in pts with rapid progression of AV suggesting common mechanisms.