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CARDIAC CATHETERIZATION AND PERCUTANEOUS CORONARY INTERVENTION IN PATIENTS WITH END STAGE LIVER DISEASE

Poster Contributions

Poster Hall B1

Saturday, March 14, 2015, 3:45 p.m.-4:30 p.m.

Session Title: Coronary II

Abstract Category: 32. TCT@ACC-i2: Complex Patients/Comorbidities

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Background: Patients with end stage liver disease (ESLD) being evaluated for orthotopic liver transplantation (OLT) are at increased risk if they also have coronary artery disease (CAD). The safety of cardiac catheterization and subsequent percutaneous coronary intervention (PCI) was assessed.

Methods: Medical Records of 6024 ESLD patients (pts) undergoing liver transplant evaluation at UCLA from 1995 to 2014 were retrospectively reviewed. 910 pts (15%) received cardiac catheterization. If CAD was significant, pts underwent either PCI or coronary artery bypass graft surgery (CABG). ESLD pts on dual antiplatelet therapy (DAPT) after PCI were compared to a control population to determine the incidence of bleeding events. Investigation of efficacy and clinical outcomes was conducted by following pts for liver transplant status and survival.

Results: CAD was diagnosed in 118 pts, (13%) of the pts who had an angiogram. PCI was performed in 81 pts, (69%) of CAD pts. Serious bleeding events post diagnostic heart cath were encountered in 1% with 1 death (0.1%). The prevalence of bleeding episodes was higher in pts who were taking DAPT after PCI (26%) compared to the control population (5%) at 3 months ($p=0.01$). PCI was successful in 93% of pts and 89% of PCI pts received cardiac clearance for OLT. PCI permitted 54% of pts to be listed for OLT and 24% of the CAD pts received an OLT. Stent thrombosis occurred in 2% and in-stent restenosis in 9%, with the use of bare metal stents (BMS). We found no difference in mortality between ESLD pts without CAD 23% or with CAD 26% ($p=0.5$); 95% of deaths were from liver failure and 5% were cardiac deaths.

Conclusion: Catheterization and PCI in patients with ESLD is safe, even from the femoral artery, and facilitates listing for OLT in patients who otherwise would be rejected due to untreated CAD. Improved medical management of ESLD patients and improved outcomes from revascularization therapy has decreased the mortality from CAD in this high risk patient population.