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CARDIAC CATHETERIZATION IN PATIENTS WITH END STAGE LIVER DISEASE: RISKS AND OUTCOMES

i2 Poster Contributions McCormick Place South, Hall A Saturday, March 24, 2012, 9:30 a.m.-Noon

Session Title: Outcomes of Patients Treated with PCI

Abstract Category: 13. PCI - Complex Patients, Diabetes, Renal Insufficiency

Presentation Number: 2523-243

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Objective: To assess the outcome of cardiac catheterization or percutaneous coronary intervention (PCI) in patients with end stage liver disease (ESLD) awaiting orthotopic liver transplant (OLT).

Background: There is little data about adverse events and bleeding complications during cardiac catheterization in ESLD patients who have an increased risk with arterial punctures. In addition, it is unclear if PCI impacts the survival rate in ESLD patients with coronary artery disease (CAD).

Methods: The records of patients with ESLD awaiting OLT who underwent cardiac catheterization from January 2006 to June 2011 were reviewed. The severity of CAD and the outcome of PCI were evaluated. The pre-operative non-invasive stress tests were compared with the coronary angiographic findings. Death rates were compared in patients segregated by presence of CAD, OLT, or PCI.

Results: Of the 301 records reviewed, 47 patients (15.5%) were diagnosed with CAD on angiography and 33 (70%) of them had PCI. 106 patients (35%) received an OLT. Of 94 (31%) deaths, the majority (82/94) were from liver disease. Peri-catheterization bleeding episodes occurred in only 4 patients (1%); classified as TIMI Minor (1) and TIMI Minimal (3). The sensitivity and specificity of Lexiscan Myoview Stress Test were 50% and 91%, and for Adenosine Stress Test: 61.5% and 93.5%. The prevalence of patients on dialysis-pre-catheterization was significantly higher in those with CAD compared to those ESLD patients without CAD (p=0.04). The death rate in all patient groups was similar; the mean age at the time of death was the highest in patients who underwent PCI prior to OLT.

Conclusions: The incidence of bleeding events after cardiac catheterization using the femoral artery in ESLD patients is low. Both Lexiscan and Adenosine Stress Tests have low sensitivity for diagnosing CAD in this patient population. Aggressive diagnosis and management in patients with CAD demonstrates a post-OLT survival rate similar to ESLD patients without CAD.