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Introduction: Donation after cardiac death (DCD) donors have been proposed to partially overcome the organ donor shortage. Liver transplantation (LT) from DCD donors remains controversial, with reported increased risk of graft failure and ischemic type biliary tract lesions. We retrospectively reviewed our experience with DCD LT and compared the DCD results with the ‘classical’ donation after brain death (DBD) LT in the same period.

Patients and methods: From 2003 to June 2008, amongst 176 consecutive LT, 19 (10.7%) DCD LT were performed. These 19 cases were compared to the 113 primary DBD whole LT, excluding combined or partial graft procedures. Liver graft allocation was patient driven in the DBD group, and centre driven for the DCD patients. Primary endpoints were graft failure and patient death. Graft survival was defined as time from liver transplantation to graft loss and patient death at follow-up. Patient survival was considered from time to first transplantation to patient death. Data are presented as mean ± SEM. P value < 0.05 was considered as significant.

Results: Procurement DCD warm ischemia was 20 ± 1.5 min. The DCD donors were significantly older (53.3 ± 3 vs 41.5 ± 1.3 min), had more cardiac arrest phases, had higher BMI (26.2 ± 0.7 vs 23.9 ± 0.3), and longer ICU stay (6.1 ± 0.7 vs 3.8 ± 0.2 days). Due to brain death, DBD donors had higher 24 hr urine output, higher sodium and increased need for pressors. Liver tests were similar. MELD score was significantly lower in the DCD group (13.3 ± 0.8 vs 18.8 ± 1.3). Suture time was longer in the DCD group (39 ± 1.6 min vs 34 ± 0.9 min), and cold ischemia was shorter in the DCD group (304 ± 25 min vs 421 ± 15 min). Posttransplant peak AST was 3,078 ± 1,162 U/L in the DCD group, compared to 1,730 ± 325 U/L in the DBD group (p < 0.01). Peak bilirubins were not significantly different. There was no difference in patient and graft survival at 1 and 5 years. Graft and patient survivals were 100% and 100% at one year in the DCD group, and 83% and 78% in the DBD group (ns). There was no PNF in the DCD group. There were 2 deaths in the DCD group, related to malignancy. Two DCD patients developed biliary stenoses requiring endoscopic and/or surgical management. No DCD patient underwent retransplantation.

Discussion: In this series, DCD LT appears to provide results equal to DBD LT. The procurement DCD warm ischemia time was not different from the reported series in the literature. Short cold ischemia and recipient selection may be the keys to good results in DCD LT.

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ROLE OF THE CIRRHOSIS RISK SCORE FOR THE PREDICTION OF FIBROSIS PROGRESSION IN HEPATITIS C PATIENTS WITH MINIMAL LIVER DISEASE. E. Trepo (1), P. Pradat (2), B. Young (3), R. Lagier (3), C. Moreno (1), J. Sninsky (3), A. Lemmers (1), T. Gustot (1), D. Degre (1), V. Vercruysse (1), E. Quertinnont (1), C. Trepo (2), M. Adler (1). (1) ULB, Brussels, Belgium; (2) INSERM U871, Lyon, France; (3) Celera, Alameda, CA, USA.

Background and aims: Fibrosis progression in patients with chronic hepatitis C viral (CHC) infection is highly variable and those factors associated with progression remain poorly understood. A Cirrhosis Risk Score (CRS) based on seven genetic variants and gender has been recently developed (Celera, Alameda, CA) for identifying patients at risk for cirrhosis. The objective of this study was to assess the role of the CRS for predicting fibrosis progression in CHC patients with mild liver fibrosis and ≤5 years of follow-up.

Methods: CHC patients from Hôpital Erasme, Brussels, Belgium, were retrospectively analyzed. Only patients with a fibrosis META VIR score of F0-F1 at first biopsy were included. Patients were classified as progressors if they showed an increase of at least 2 fibrosis stages at the second histological evaluation. If the decrease was below 2 points after at least 5 years of follow-up or if patients remained stable, they were classified as non-progressors. After DNA extraction, the CRS was assessed using a multiplex PCR and Oligonucleotide Ligation Assay based on the Luminox® 200TM system. Patients with confounding factors such as heavy alcohol consumption were excluded.

Results: Twenty-five patients were studied with a mean age of 51 years. Twelve patients were classified as progressors (48%) and 13 (52%) as non-progressors. The CRS was significantly associated with fibrosis progression (0.72 in progressors vs 0.49 in non-progressors, p = 0.050).

Conclusions: Although conducted on a limited number of patients, this study confirms that an increased CRS is associated with fibrosis progression. Thus, the CRS could help to identify those CHC patients with mild liver disease at the highest risk for fibrosis progression to cirrhosis. This association and the potential relevance of CRS for the management of treatment decisions in patients at risk of progression should be further evaluated.