Volume 22 • Supplement 2 • August 2009

Wiley-Blackwell

Transplant International

Transplant International

Official Journal of the European Society for Organ Transplantation
and the European Liver and Intestine Transplant Association

Abstracts for the 14th Congress of the European
Society for Organ Transplantation
30 August–2 September 2009, Paris, France

www.transplantinternational.com

Transplant International

www.transplantinternational.com

extended donor right lobectomy in 13 cases (group EL; 20.6%). No MHV reconstruction was done in 3 cases (group NR; 4.8%) (table 1). In group R, V5 in 18 cases (28.6%), V8 in 1 case (1.6%) and both in 28 cases (44.4%) were reconstructed. Anterior sector congestion was detected in 22 cases (46.8%) of group R, 2 (15.4%) of group EL and 2 (66.7%) of group NR respectively. There were no significant differences of the graft volume growth rate between each group at post-transplant period (figure 1). Also, there was no significant difference between the congestion group and the non-congestion group (figure 2).
Laboratory findings did not show statistical differences in each group. We concluded that MHV reconstruction may not be mandatory for graft regeneration when the GRWR is large enough.

P-482 THE OUTCOME OF LIVER TRANSPLANT RECIPIENTS WITHOUT RENAL SUPPORT DURING LIVER TRANSPLANTATION

Hee Kyung Kim, Jin Young Lee, Young Hee Shin, Sang Wook Ko, Mi Sook Gwak, Suk-Koo Lee, Gaab-Soo Kim. *Department of Anesthesiology and Pain Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea*

Purpose: Renal dysfunction is a very common finding in patients undergoing liver transplantation (LT). Recently, intraoperative renal support in the form of continuous renal replacement therapy (CRRT) was employed during LT for patients with renal dysfunction and demonstrated favorable outcomes. The aim of this study is to evaluate outcomes of LT recipients with renal dysfunction without intraoperative renal support.
Method: We performed a retrospective review of adult patients (age >18 years) receiving LT between January 1, 1996 and January 11, 2008 at our hospital. Renal dysfunction was defined as an acute rise in serum creatinine to ≥1.4 mg/dL. Demographic and perioperative clinical data including renal recovery and survival were collected (Table 1).

Table 1. Demographics and preoperative characteristics

Preoperative feature	n=127
Age	47.81 (8.51)
Male sex (%)	105 (82.7)
Proportion of donor	
Cadaveric donor	30 (23.6)
Living donor	97 (76.4)
Etiology of primary liver disease (%)	
HBV related liver disease	93 (73.2)
Fulminant hepatic failure	13 (10.2)
Alcoholic liver disease	8 (6.3)
HCV related liver disease	6 (4.7)
Others	7 (5.5)
Receiving renal support	10 (7.87)
MELD score*	35 (24-41)
Child-Pugh score	11.89 (1.54)
Child-Pugh class C (%)	90.6
ICU admission (%)	21.3
Mechanical ventilation (%)	11.0
Vasoactive agent (%)	11.8
Bilirubin (mg/dl)*	29.2 (5.6-41.7)
Platelets ($\times 10^3$/dl)*	56 (37-86)
PT (INR)*	2.51 (1.97-3.45)
Hemoglobin (g/dl)	9.61 (1.56)
Sodium (mmol/l)	130.8 (8.7)
Potassium (mmol/l)	4.24 (0.73)
Serum creatinine (mg/dl)*	1.7 (1.32-2.40)
Estimated GFR (ml/min/m^2)*	40.5 (24.7-63.2)
Serum urea (mg/dl)*	4.7 (2.9-7.3)

Data expressed as mean (standard deviation) or *median (interquartile range)

Result: Of 575 LT recipients, 127 patients (22%) had renal dysfunction. CRRT was required in 45 (35.4%) after LT for median (interquartile range; IQR) of 9 (5-16) days. Of these, 17 (37.8%) were transitioned to intermittent hemodialysis for a median (IQR) of 15 (8-31) days. Renal recovery defined as renal support independence occurred in 77% of survivors by 1 month and 97% of survivors by 1 year. The mean (standard deviation) estimated GFR (eGFR) was 66.29 (21.83) ml/minute/m^2, with 40.35% having an eGFR <60 ml/minute/m^2 at 1 year. Survival was 90.6% at 1 month and 78% at 1 year.
Conclusion: Intraoperative renal support may be a valuable adjuvant therapy for those with preoperative renal dysfunction; however, it has many complications. Results of our study suggest that the risk and benefit of intraoperative CRRT during LT needs further evaluation.

P-483 RESULTS OF LIVER TRANSPLANTATION (LT) FROM CONTROLLED DONATION AFTER CARDIAC DEATH (DCD) DONORS: A SINGLE CENTER EXPERIENCE

Olivier Detry[1], Benoît Seydel[1], Emmanuel Decker[1], Arnaud De Roover[1], Jean Delwaide[1], Boris Bastens[2], Christian Brixko[3], Anne Lamproye[1], Sévrine Lauwick[4], Jean Joris[4], Michel Meurisse[1], Pierre Honoré[1]. *[1]Dpt of Abdominal Surgery and Transplantation, CHU de Liège, University of Liège, Liège, Belgium; [2]Dpt of Hepatogastroenterology, CHC Liège, Liège, Belgium; [3]Dpt of Hepatogastroenterology, CHR Liège, Liège, Belgium; [4]Dpt of Anaesthesiology, CHU de Liège, University of Liège, Liège, Belgium*

Introduction: DCD donors have been proposed to partially overcome the organ donor shortage. DCD-LT remains controversial, with reported increased risks of graft failure and ischemic type biliary tract lesions. The authors retrospectively reviewed their experience with DCD-LT in a 6-year period.
Patients and methods: 24 DCD-LT were performed from 2003 to January 2009. All DCD procedures were performed in operative rooms. Mean donor age was 54 years. Most grafts were flushed with HTK solution. Allocation was mostly locally centre-based. Mean DCD warm ischemia was 19.3 min. Mean follow-up was 19 months. Several donors', recipients' and surgical characteristics were correlated with peak transminases (AST) and total bilirubin.
Results: Mean MELD score at LT was 15. Mean cold ischemia was 288 min. Mean peak AST was 2,917 U/L. Mean peak bilirubin was 55.6 mg/dL. One-, 12- and 24-month patient and graft survivals were 100%, 93.7% and 86%, respectively. These results were not different from the results of regular LT performed in the same period. No patient underwent re-LT and there was no PNF. Causes of death were sarcoma (2 cases) and recurrent HCC (1 case). Three patients developed biliary complication: one fistula requiring hepaticojejunostomy, and two successfully managed by endoscopy and/or hepatojejunostomy. No patient developed intrahepatic ischemic bile ducts. There was no correlation between peak AST and the different donor factors, including age. There was a marked trend (p=0.06) between peak AST and length of CI. There was no correlation between peak AST and bilirubin, and length of DCD warm ischemia.
Discussion: In this series, DCD-LT appears to provide interesting results. Short cold ischemia and recipient selection may be the keys to good outcome in DCD-LT, in terms of graft survival and ischemic-type biliary lesions.

P-484 QUICK LINKER DEVICE PROVES EFFECTIVE TO AVOID WARM ISCHEMIA DAMAGE DURING ORTHOTOPIC LIVER TRANSPLANTATION IN RAT

Graziano Oldani[1,2], Giacomo Angelastri[2], Marcello Maestri[2,3], Annalisa Gaspari[2]. *[1]Critical & Surgical Care, King's College Hospital NHS Trust, London, United Kingdom; [2]Laboratorio di Chirurgia Sperimentale, Università degli Studi di Pavia, Pavia, Italy; [3]Chirurgia Epato-Pancreatica CEPPE I-II, Fondazione IRCCS Policlinico San Matteo, Pavia, Italy*

Background: The clinical success of liver transplantation is founded upon years of experimental research. Since Kamada and colleagues developed the "two-cuff" technique, the rat has become the best model for extensive investigations. Although the Kamada technique is technically complex and not easy to master, it is still the mainstay of orthotopic liver transplantation (OLT) in rodents. In 2008 we developed a simpler modified "two-cuff" version of this technique that facilitates anastomosis and markedly reduces implantation time. Furthermore, in this latest work, we investigated on how such improvement can influence warm ischemia damage
Methods: Ten male Lewis rats (group 1, donors n=10, recipients n=10) underwent liver transplantation using the Quick-Linker system (designed and man-