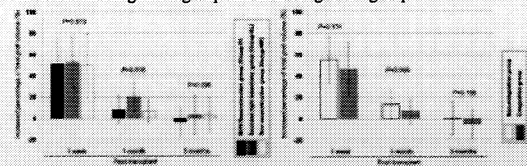


for patients with Wilson's disease who present with fulminant liver failure and for patients' unresponsive to medical therapy. The aim of this study is to review our experience with LT for patients with Wilson's disease. Between September 2001 and January 2008, 28 LTs were performed at our center in 27 patients with Wilson's disease. Our Wilson's disease series comprised 7 female and 20 male patients (mean age, 15.6 ± 9.9 years; range, 5-51 years). Six patients were transplanted owing to coexistent fulminant hepatic failure. Twenty patients presented with chronic advanced liver disease with (n = 10) or without (n = 10) associated neurologic manifestations. We performed full-size, deceased-donor in 3 LTs and living-related donor in the remaining 25 LTs. Eight patients had a family history of Wilson's disease. We detected a Kayser-Fleischer ring in 21 patients. All patients had a low serum ceruloplasmin level (mean, 27.8 mg/dL) and a high urinary copper excretion level (mean, 4119 µg/d) before LT. Following successful LT, there was a significant reduction in urinary copper excretion (median, 37.1 µg/d) in all patients. Mean follow-up was 25.7 ± 19.8 months (range, 2-69 months). Retransplant was required in 1 patient 12 days after the first LT owing to primary graft nonfunction. Five of the 27 patients died within 4 months of the surgery. The remaining 21 survivors (81.5%) have remained well, with normal liver function and no disease recurrence. In conclusion, LT is a curative procedure for Wilson's disease in patients presenting with fulminant hepatic failure and others with end-stage hepatic insufficiency. After LT, the serum ceruloplasmin level increases to the normal range, urinary copper excretion decreases, and neurologic manifestations improve.

**Abstract# P-523**

**DOES VENOUS RECONSTRUCTION OF THE ANTERIOR SECTOR AFFECT ON GRAFT REGENERATION IN LIVING DONOR RIGHT LOBE LIVER TRANSPLANTATION?** Dong Jin Joo, Myoung Soo Kim, Soo Jin Kim, Gi Hong Choi, Man Ki Ju, Jin Sub Choi, Soon Il Kim. *Department of Surgery and The Research Institute for Transplantation, Yonsei University College of Medicine, Seoul, Republic of Korea*

**Background:** To prevent congestion of the liver graft and to meet the metabolic demand of the recipient, middle hepatic vein (MHV) reconstruction can be used in living donor liver transplantation (LDLT). The purpose of this study is to assess the correlation between MHV reconstruction and graft regeneration and to compare volume regeneration with congestion in each segment. **Patients and Methods:** From September, 2005 to April, 2008, there were 67 cases of adult LDLT and 63 cases were enrolled in this study. Among the 63 adult LDLT with the right lobe, MHV reconstruction was performed in 47 cases (group R; 74.6%) and extended donor right lobectomy in 13 cases (group EL; 20.6%). No MHV reconstruction was done in 3 cases (group NR; 4.8%). **Results:** GRWR of each group in order was 1.29 ± 0.28 %, 1.06 ± 0.13 %, and 1.57 ± 0.62 % respectively. In group R, V5 in 18 cases (28.6%), V8 in 1 case (1.6%) and both in 28 cases (44.4%) were reconstructed. The calculated liver volume significantly correlated with the actual graft weight measured in the operating room (r=0.786, P<0.0001). Anterior sector congestions were detected in 22 cases (46.8%) of group R, 2 cases (15.4%) of group EL and 2 cases (66.7%) of group NR respectively. The most graft volume was restored within 1 week after transplantation. There were no significant differences of the graft volume growth rate between each group at post-transplant. Also, there was no significant difference in graft regeneration rate between congestion group and non-congestion group.



Clinical parameters measured with AST, ALT and total bilirubin did not show statistical differences in each group. **Conclusion:** We suggest that some mechanism such as collateralization may exist in graft regeneration especially in the congested graft. We concluded that MHV reconstruction may not be mandatory for graft regeneration when the GRWR is large enough.

**Abstract# P-524**

**EFFICIENT TISSUE INCORPORATION OF COMPOSITE MESHES USED FOR INCISIONAL HERNIA REPAIR AFTER LIVER TRANSPLANTATION.** Frederik Berrevoet<sup>1</sup>, Bert Van den Bossche<sup>2</sup>, Isabelle Colle<sup>2</sup>, Hans Van Vlierberghe<sup>2</sup>, Koen Reyntjens<sup>3</sup>, Roberto Troisi<sup>1</sup>, Xavier Rogiers<sup>1</sup>, Bernard de Hemptinne<sup>1</sup>. <sup>1</sup>General and Hepatobiliary Surgery and Liver Transplantation, University Hospital Medical School Ghent, Ghent, Belgium; <sup>2</sup>Gastroenterology, University Hospital Medical School Ghent, Ghent, Belgium; <sup>3</sup>Anaesthesiology, University Hospital Medical School Ghent, Ghent, Belgium

**Background:** Patients after orthotopic liver transplantation (OLT) have a 5% to 17% risk of developing incisional hernia. Surgeons intend to avoid extensive dissection repairing these defects using a sublay technique, while using intraperitoneal onlay repair (IPOM) with composite meshes, tissue ingrowth of the mesh material seems to be warranted in these immunosuppressed patients. We prospectively analysed the incidence and management of incisional hernia after liver transplantation in our centre.

**Patients and methods:** From January 2000 till July 2008 52 patients were operated for incisional hernia repair after 434 OLT. Depending on the location and the size of the hernia a retromuscular sublay repair using large pore polypropylene mesh or IPOM using a composite mesh was performed. All patients were treated using abdominal drains for 2 days on the mesh and for several more days for the subcutaneous drains depending on the drainage volume. Patients were evaluated for risk factors, including the type of incision, the need for relaparotomies and wound infections. Data about operation time, seroma, haematoma, mesh infection and recurrence were noted.

**Results:** The central part of the incision was by far the most frequent location of the hernia with a mean diameter of 8cm. Although in all cases a retromuscular sublay repair was the initial goal for repair, only 17.3% of patients could be treated using this 'gold standard' repair. Forty-three patients (82.7%) were treated with IPOM using composite mesh. Despite drainage, significantly more seromas were observed after IPOM, all but two treated conservatively. No patients were reoperated for haematoma, while 2 patients developed a superficial wound infection. Operation time was shorter in the IPOM group while after a mean follow-up of 28 months only one recurrence, after IPOM, was observed after 32 months, treated expectantly.

**Conclusion:** Although retromuscular sublay repair remains the gold standard in incisional hernia repair, intra-abdominal composite mesh repair can be used with low morbidity and low recurrence rate after liver transplantation.

**Abstract# P-525**

**LEFT LIVER LOBE TRANSPLANTATION IN ADULT RECIPIENTS FROM SPLIT LIVERS AND LIVING DONORS.** Olivier Boillot, Gabriella Pittau, Thomas Gelas, Jérôme Dumortier, Yves Bouffard, Catherine Boucaud, Charles Ber, Pierre Sagnard. *Liver Transplant Unit, Edouard Herriot Hospital, Lyon, France*

The use of left livers for transplantation in adult recipients remains controversial and challenging. We present a single center experience of left lobe transplantation over a 12 year period.

**Patients and methods.** From March 1996 to November 2008, 27 adult patients, 13 males and 14 females with a mean age of 49 years (range: 18-67), a mean body weight of 59 kg (range: 40-84) received a left lobe transplant from 17 split livers and 10 living donors. Mean Graft-to-Recipient-Ratio (GRWR) and mean MELD score were 0.88% (range: 0.57%-1.28%) and 18 (range: 6-32) respectively. Main indications for liver transplantation (LT) were alcoholic (n=10) and viral-related (n=6) cirrhosis; 4 patients did not have cirrhosis and 3 had late retransplantation. In 12 patients, a venous splanchnic decompression (2 porta-caval shunts and 10 meso-caval shunts with portomesenteric disconnection) was performed at the end of the transplant procedure in order to decrease portal pressure to the graft.

**Results.** After a mean follow-up period of 43 months, 18 (66.6%) out of the 27 patients are alive; 3 patients had early retransplantation for technical complication, small-for-size syndrome and venous portal steal syndrome. Six deaths (22.2%) occurred in the peri-operative period from graft ischemia due to excessive portal decompression in the 2 patients with porto-caval shunt, sepsis after re-LT in 2 cases, small-for-size syndrome in 1 case and cardiac failure in 1 case. In univariate analysis, risk factors for early patient death were GRWR below 0.8% and portal decompression. When no portal decompression was performed, all 15 recipients survived without need for retransplantation.