increased fibrosis stage at 2-years post OLT (2.7 *vs* 1.5, p= 0.01). For older grafts transplanted into HCV(+) patients, recipient age was an independent risk factor for graft loss (HR: 2.1, CI 1.06-3.9, p= 0.03) and patient death (HR: 2.3, CI 1.2-4.8, p= 0.01). **Conclusion:** Older donor grafts do worse in older recipients, and this effect is exaggerated in HCV(+) patients. If an older graft can only be offered to HCV(+) patients, consideration should be given to the younger recipient.

Abstract# O-51

"DE NOVO" AMYLOIDOSIS IN RECIPIENTS OF DOMINO LIVER TRANSPLANTATION: CLINICAL AND HISTOLOGICAL DATA. Laura Lladó[1], Carme Baliellas[1], Joan Fabregat[1], Carles Casasnovas[2], David Julià[1], Xavier Sanjuan[3], Emilio Ramos[1], Jaume Torras[1], Rosa Rota[1], Antoni Rafecas[1]. *[1]Liver Transplant Unit, Hospital U Bellvitge, Barcelona, Spain; [2]Neurology, Hospital U Bellvitge, Barcelona, Spain; [3]Pathology, Hospital U Bellvitge, Barcelona, Spain*

Domino liver transplantation have been performed in more than 400 patients through the world. However data about the real incidence of FAP symptoms and amyloid deposition on domino recipients is scarce. The aim of this study was to evaluate the incidence of intestinal amyloid deposits and clinical symptoms in domino recipients transplanted at our institution.

Patients and Methods: Since June 2000 till 2008 we have performed 31 domino liver transplantations. A transversal study of all alive patients has been performed; the study included focused gastrointestinal and neurological symptoms were evaluated, rectal mucosal biopsy and electromiography.± 2.7 years old. From the 31 transplanted patients, 9 had died previously to the current study (without symptoms of amiloidosis). From the 22 alive patients, 2 rejected the study, and 3 had less than 6 months follow-up. The remaining patients were studied in 2008, after a mean follow-up of 88 ± 21 months. In 5 cases, the patients were asymptomatic and all the studies were normal. Six patients had amyloid deposits at the rectal biopsy. 3 patients had both neurological symptoms and electromiographic alterations. In one case sural nerve biopsy was performed, being the diagnosis of vasculitic neuropathy without amyloid.

Conclusions: Amyloid deposition in mucosal gut of domino recipients is not unfrequent, however (even after a quite long follow-up) symptoms are rare. Thus, domino liver transplantation is indicated in selected patients.

Anesthesia/Critical Care Medicine

Abstract# O-52

LTrAC 201 – LOOKING FOR EVIDENCE (2). Ann Walia, Roman Schumann, Damon Michaels, Nate Mercaldo, Susan Mandell, Pratik Pandharipande. *Anesthesiology, Vanderbilt University, Nashville, TN, USA*

Introduction: Despite > 6000 liver transplants (LT)/year in the US , sparse data exists to guide intraoperative anesthetic management. This 2nd international survey by the LTrAC (Liver Transplant Anesthesia Consortium) aims to identify prevalent intraoperative monitoring strategies during LT.

Methods: US centers (>10 adult LT/yr) were contacted electronically or by mail, excluding those with independent contracting services. International centers were recruited via the LiCAGE website.

Results: 81 Anesthesiologists from 47 of 80 eligible US centers responded (59%), while 20 international Anesthesiologists (13 countries) responded. US centers were categorized as: >100 transplants/year (high volume); 50-100(mid); 11-50(low). Table 1 shows intraoperative monitors used in the US by center volume. Use of these monitors was similar in the US and International centers, though latter showed trends towards greater femoral arterial line use (40% vs. 23.5%, p=0.22) and lower pulmonary artery catheter use (70% vs. 86.4%, p=0.15).

Monitors Used for Liver Transplants in US Centers

Monitors	US Centers by Size			
Number of responses	Low (n = 17)	Mid (n = 45)	High (n = 19)	p-Value
Femoral arterial line (%)	18	29	16	0.43
Single central line (%)	41	33	16	0.22
Rapid infusion catheter (%)	88	71	74	0.37
Femoral CVP (%)	23	29	26	0.91
PAC (%)	94	87	79	0.41
Mixed venous Oxygen (%)	65	64	58	0.87
TEE (%)	35	42	53	0.57

Venovenous bypass (VVBP), total venous occlusion (TVO) and partial venous occlusion (PVO) was similar across US centers (Table 2), though use of intraoperative thromboelastogram (TEG) varied by center size. International centers showed trends towards lower VVBP use (25% vs. 46.9%, p=0.13), TVO use (30% vs. 54.3%, p=0.09) and greater platelet function monitoring (40% vs. 14.8%, p=0.03).

Intraoperative Techniques for Liver Transplants

Intraoperative technique	US Centers by Size			
Number of responses	Low (n = 17)	Medium (n = 45)	High (n = 19)	p-Value
Low CVP (%)	47	60	53	0.63
VVBP (%)	53	42	53	0.64
PVO (%)	82	71	74	0.67
TVO (%)	41	56	63	0.41
TEG (%)	41	73	84	0.01
Platelet Function (%)	23	13	10	0.50
Fibrinogen (%)	88	73	68	0.35

Conclusion: LTrAC 201 is an international survey examining variations in monitoring practices during LT. Practice variability with trends depending on transplant volume and center location (US vs. International sites) persists.

Abstract# O-53

HEPATIC ARTERY FLOW AND CARDIAC OUTPUT: CORRELATION BETWEEN SYSTEMIC AND LIVER HEMODYNAMICS. Mauricio Sainz-Barriga[1], Koen Reyntjens[2], Eva-Line Decoster[1], Xavier Rogiers[1], Bernard de Hemptinne[1], Roberto Troisi[1]. *[1]General and Hepato-Biliary Surgery, Liver Transplantation Service, Ghent University Hospital & Medical School, Ghent, Belgium; [2]Anesthesiology, Liver Transplantation Service,*

Objective. A prospective study was carried out to investigate the relationships between systemic and liver graft hemodynamics during liver transplantation (LT). **Methods.** Hemodynamic data were collected during 85 consecutive LT between November 2006 and October 2008. Whole 72%, split 16%, living donor 6% and DCD grafts 6% were considered. Systemic hemodynamics, intraoperative flow and pressure measurements were recorded at predefined time points. Portal vein flow (PVF) and hepatic artery flow (HAF) were measured with US transit time flowmeter. The hepatic artery vascular resistance (VRHA) was calculated as the mean arterial pressure minus the central venous pressure divided by the measured HAF. Sixty-one historical living donors served as controls, creating 4 separate groups of hepatic flows for survival analysis. Correlation and the log-rank test were used where appropriate. Differences were considered significant when $p<0.05$. **Results.** Median FU was 12.1 (0.25-26) months. PVF was augmented whereas HAF decreased concomitantly respect to controls following reperfusion (p 0.05). Cardiac output (CO) correlated with HAF ($r=0.48$; $p=0.002$). The HAF showed an exponential negative correlation with the VRHA ($r=-0.7$; $p<0.0001$). CO showed also a negative correlation with the systemic vascular resistance ($r=-0.64$; $p<0.0001$). The PVF/HAF ratio (PAR) showed a direct correlation with VRHA ($r=0.68$; $p<0.0001$). PAR showed an exponential negative correlation with HAF ($r=-0.61$; $p<0.0001$) and a direct correlation with PVF ($r=0.5$; $p<0.0001$). One-year graft survival showed a trend for inferior survival in the low portal flow group (85.6% vs. 97%); patient survival was significantly inferior for the low portal vein flow group (78.4% vs. 88.7; p=0.02). **Conclusions.** The HAF increases with CO and decreases with hepatic artery resistance. A similar relationship was observed between cardiac output and systemic vascular resistance. After LT the intrahepatic buffer response is active as showed by the opposite effect of the PAR in the hepatic artery and portal vein flows. Both, systemic hemodynamics and the intrahepatic buffer response influence the hepatic artery blood flow. We demonstrated that hepatic flow correlate with systemic flow during liver transplantation.

Abstract# O-54

CAN A 'ONE-STOP-SHOP' APPROACH TO LIVER TRANSPLANTATION PRE-OPERATIVE EVALUATION EXIST VIA 3D CARDIOVASCULAR MRI? Ngoc Thai, Michael Dishart, Bryan Veynovich, Kusum Tom, Jose Oliva, Anil Singh, Saundra B. Grant, June A. Yamrozik, Ronald B. Williams, Vikas K. Rathi, Mark Doyle, Robert W. W. Biederman. *Allegheny General Hospital, Pittsburgh, USA*

Background Classical peri-operative (PO) evaluation for liver transplants (LTX) involves echocardiography and stress nuclear imaging to define risk, prognosticate and to provide cardiac clearance. Cardiovascular MRI (CMR) has emerged as the 'gold standard' to evaluate many important CV metrics due to its unparalleled spatial resolution, lack of ionizing radiation and 3D capabilities.