

Transplantation (OLT) in the United States in the MELD Era. S. N. Becker,¹ C. A. Szarek,² N. L. Sussman,¹ J. M. Vierling,¹ R. J. Snel¹ & D. Haskay Department of Surgery, Baylor Univ. TX.

have reported survival differences after orthotopic resection racial groups. The current study examines end after implementation of the Model for End-Stage Liver Disease (MELD) era.

OLTs performed from 2/2002-12/2005 were extracted from Organ Sharing (UNOS) database. Patient survival calculated and compared. Demographic and clinical variables and multivariate analyses of patient survival.

Caucasian, 12.2% Hispanic, 8.9% African-American 1-yr patient survival were 85% and 77%. Stratified by race different from Caucasian (2-yr survival) of 71% Caucasian, African-American patients were younger (p=0.001) to be Status 1 (10.3% vs. 5.1%), to have 37% vs. 31%), to receive an multi-organ transplant (p=0.001) to be to the ICU (16% vs. 11%), and to be ventilated (>72 hrs) (<0.001). After adjustment for each of these pre-variables predictor of mortality (p<0.01, HR: 1.22, CI: 1.04-1.43) (p<0.001, HR: 2.5, CI: 1.49-4.17), a creatinine >2.0, HR: 1.6, CI: 1.18-2.19), and ICU admission (p=1.107-2.17) are independent predictors of mortality.

Conclusion: Race is still a predictor of worse outcomes, even after adjustment for clinical variables. Further work is necessary to elucidate

Leucocytes	73%	17%	61%	86%	100%
Syphilitic	17%	19%	24%	30%	9
Thrombocytopenia	3%	3%	10%	0	9
Shortness of breath	3%	0	0	0	2
Mean Gestational age (wk)	36.4	36.3	37.0	36.4	37.2
Prevalence (n: 37 wk)	41%	27%	36%	59%	50%
Mean birthweight (g)	2562±832	2902±634	2735±718	2325±829	2866±751
Low birthweight (<2500 g)	42%	27%	29%	56%	55%
Neonatal death	2%	0	0	0	0
Rejection during pregnancy	31%	7%	14%	0	0
Stillborn within 2 yrs of delivery	7%	3%	10%	0	0

¹includes twins

CONCLUSIONS: Successive pregnancies in liver transplant recipients are not associated with adverse fetal outcomes and/or increased maternal graft loss. Female liver recipients with excellent allograft function without significant recurrent disease or chronic rejection who wish to have more than one pregnancy should not be discouraged to conceive.

Abstract# 401

A Randomized Trial of Intra-Operative Biliary Stent at Orthotopic Liver Transplantation. Marylise Beutros,¹ Amy Neville,¹ Dionisios Trochides,¹ Steven Paraskevas,¹ Proszato Chaudhary,¹ Peter Metrakos,¹ Jean Tchervenkov,¹ Myriam Fernandez,¹ Marcelo Cantavioch,¹ Marc Deschenes,¹ Peter Ghali,¹ Philip Wong,¹ Jeffrey S. Barkun,¹ Division of General Surgery, Department of Surgery, McGill University Health Centre, Montreal, QC, Canada; ²Multi-Organ Transplant Program, Department of Medicine, McGill University Health Centre, Montreal, QC, Canada.

Purpose:

Biliary complications remain one of the most problematic issues in liver transplantation. Following a published series of cases, we hypothesized that placement of a biliary endoprosthesis at the time of orthotopic liver transplantation (OLT) will decrease the rate of early biliary complications (BC) and the need for biliary interventions after OLT.

Methods:

We conducted a randomized trial of direct operative placement of a biliary endoprosthesis in the cholecysto-choledochal anastomosis (CCA) at the time of OLT. There was no difference in the post-operative management between stented and non-stented patients, except that stented patients underwent an ERCP at 6 weeks to remove it. BC were

recorded and categorized in a blinded fashion. Univariate, multivariate and survival analyses were performed.

Results:

Over a 4.5-year period (2002-2007), 148 OLT recipients were randomized to receive a CCA with biliary stent (n=76) or CCA alone (n=72). Patients with hepatic artery thrombosis (n=8; 5.7%) were excluded. There was no significant difference in demographic or graft-related variables. The mean age at transplant was 55 years, 82% were male, the mean MELD was 21 and 22% had hepatitis C. The mean donor age was 46 years, 59% of donors were male, and the mean cold ischemia time was 8.7hrs. The only complication related to the biliary stent was one occlusion. The rate of overall BC in the stented patients was 24.7% vs. 32.8% in non-stented patients, (p=NS). However, stented patients had significantly less BC in the first 60-days post-OLT (6.8% vs. 21.0%, p=0.02) and significantly less asymptomatic leaks (2.4% vs. 9.6%, p=0.05). Over the year following OLT, stented patients also required less biliary therapeutic interventions (mean 1.8 vs. 0.9 interventions/patient, p=0.04) and fewer readmissions (mean 2.8 vs. 1.6 readmissions/patient, p=0.01). We also observed improved late graft survival (p=0.05) in the stented group.

Conclusions:

Intraoperative stenting of the CCA at OLT does not appear to reduce the long-term rate of BC but it decreases the incidence of biliary leaks and significantly improves many facets of early patient management.

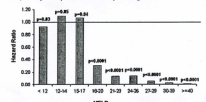
Abstract# 402

Is There Survival Benefit of Retransplantation of the Liver? A 23-Year Experience at a Single Center. Johnny C. Hong,¹ R. Mark Ghorbali,¹ Douglas G. Farmer,¹ Jianming Xu,¹ Huan Yezzi,¹ Jonathan R. Hiatt,¹ Ronald W. Busuttil,¹ Surgery, University of California Los Angeles, Los Angeles, CA.

Background: Long-term outcomes after retransplantation of the liver (re-OLT) is inferior compared to primary OLT. However, the survival benefit of re-OLT based on Model for End Stage Liver Disease (MELD) is not known.

Methods: A single-center analysis of 421 adult patients who underwent re-OLT between February 1984 to February 2007 was performed. Survival benefit, at a given MELD score, were calculated by comparing re-OLT survival at 3 months to expected 3-month survival without retransplantation.

Results: Of 421 pts, 380 underwent re-OLT, and 41 received 3 transplants. The figure shows re-OLT survival benefit at any MELD score with increased significance in patients with MELD scores ≥ 18 . Although MELD scores 30-40 predicted the highest mortality after re-OLT, they also demonstrated survival benefit. Multivariate Cox regression identified cold ischemia time >10 hrs (RR 1.8, P<0.001), MELD 30-40 (RR 2.0, P<0.04), time from first OLT (8 days - 1 year, RR 1.8, P<0.02) and third transplant (RR 1.7, P<0.03) as independent predictors for mortality following re-OLT.

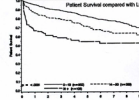


Results:

LOS	LOS group compared with MELD and LOS	
	Median MELD (n)	Median MELD (n) (95% CI)
<14 days	15 (972)	16 (245)
14-30 days	19 (247)	18 (39)
>30 days	21 (124)	21 (14)
P value	<0.0002	<0.0001

Complication	LOS >14 days vs LOS <14 days	
	Odds Ratio (95% CI)	P-value
Leak	2.647 (1.661-4.210)	Leak
Reoperation	2.438 (1.703-3.529)	Reoperation
Biliary	4.480 (2.88-7.256)	Biliary
Other	4.407 (3.013-6.348)	Other
Abstinence (other than liver)	3.451 (2.195-5.435)	Abstinence
Death	2.408 (1.703-3.439)	Death
Weight	3.335 (2.309-4.848)	Weight
Vanilla	1.829 (1.199-2.788)	Vanilla
Application of liver allograft	3.695 (2.513-5.282)	Application of liver allograft

Univariate analysis: Allograft dysfunction, vascular com intra-abdominal (other than liver), biliary, cardiac, pulmonary and endocrine were statistically significant (p<0.001) with LOS >14 days and >30 days. LOS >14 days and LOS >30 days were statistically significant (p<0.001) with LOS >14 days and >30 days. LOS >14 days and LOS >30 days were statistically significant (p<0.001) with LOS >14 days and >30 days.



Conclusion: Analysis of 1427 liver transplant donors increasing MELD in each donor age group (50-60, 61-70 >70), this relationship was not significant (p=0.2206). Logistic regression determined odds ratio estimates for LOS >14 days and >30 days. LOS >14 days and LOS >30 days different complications (as shown above). Allograft dysfunction complications were not significant factors in multivariate analysis (p=0.001) with LOS >14 days and >30 days.

Abstract# 404

Recurrent Primary Biliary Cirrhosis after Liver Transplantation: A Single-Center Experience. J. M. Vierling,¹ S. N. Becker,¹ N. L. Sussman,¹ J. M. Vierling,¹ R. J. Snel,¹ D. Haskay,¹ Baylor Univ. TX.