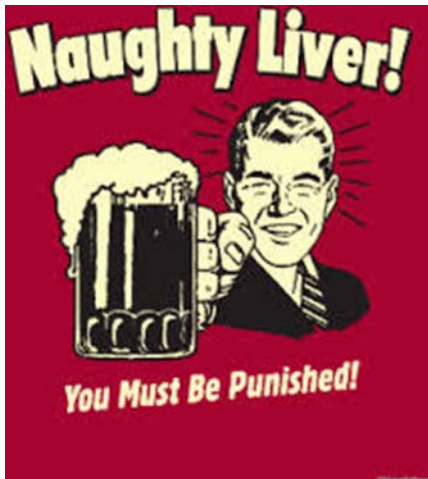
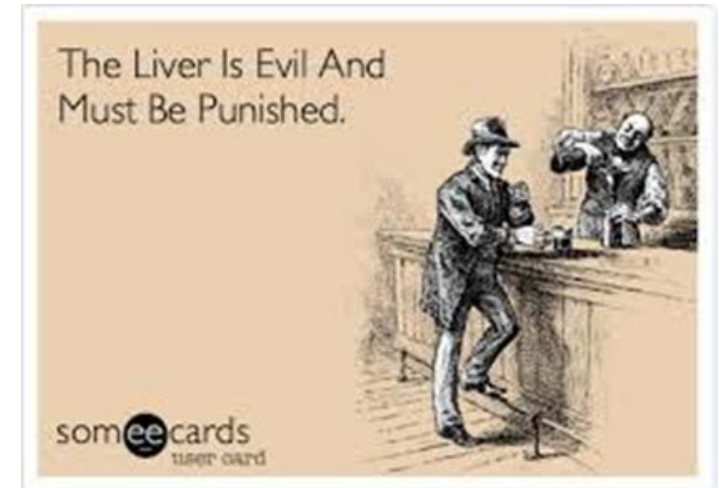


Liver Transplantation for Alcoholic Liver Disease

Medical and Ethical Considerations



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Founding Director,
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Northwestern Medicine



OptumHealth Education,
Scottsdale, April 11, 2019

Disclosures

- I like a drink every now and then...
- I have no other disclosures relevant to this talk

Learning objectives

- Review liver transplantation for alcoholic liver disease, including the selection process for transplant eligibility
- Identify specific factors that should be addressed when evaluating individuals for liver transplant
- Discuss whether a mandatory period of alcohol abstinence is a predictor of relapse
- Explore ethical considerations on the eligibility of liver transplant candidates

Medical Considerations

Alcoholic Liver Disease (ALD)

- Types of ALD
 - Alcoholic cirrhosis
 - Alcoholic hepatitis
 - Acute-on-chronic alcoholic liver failure
 - 'something else' plus ALD
- Alcoholic hepatitis (NIAAA Alcoholic Hepatitis Consortium)
 - Onset of jaundice within previous 8 week, ongoing heavy alcohol consumption for ≥ 6 months and < 60 days abstinence prior to jaundice
 - $AST > 50 IU/l$, $AST/ALT > 1.5$, $TB > 3 mg/dl$
 - Biopsy demonstrating steatohepatitis (macrosteatosis plus neutrophil infiltration or ballooning degeneration or Mallory-Denk bodies)
- Predictive scores
 - Generally $NPV > PPV$

Early liver transplantation for severe alcoholic hepatitis: moving from controversy to consensus

Brian P. Lee and Norah A. Terrault

Table 1. Prognostic models for severe alcoholic hepatitis

Prediction model	Lab components			30-Day mortality ^a		90-Day mortality ^a	
	Day of admission	Day 7 of treatment	Cut-off score	PPV	NPV	PPV	NPV
Maddrey's mDF	Bilirubin, PT	–	32	0.20	1.00	0.29	1.00
MELD	Bilirubin, INR, creatinine	–	21	0.38	0.96	0.57	0.96
ABIC	Bilirubin, INR, creatinine, age	–	9	0.33	0.92	0.50	0.91
Glasgow AH	Bilirubin, PT, age, WBC, BUN	–	9	0.27	0.94	0.38	0.97
Lille	Bilirubin, PT, creatinine, age, albumin	Bilirubin	0.45	0.44	0.91	0.56	0.86

ABIC, age/bilirubin/INR/creatinine score; AH, alcoholic hepatitis; mDF, modified discriminant function; MELD, model for end-stage liver disease; PT, prothrombin time.

^aPositive predictive values (PPV) and negative predictive values (NPV) from results of U.K. study [12], which sought to validate prediction models in a cohort of 71 consecutive patients with biopsy-proven AH.

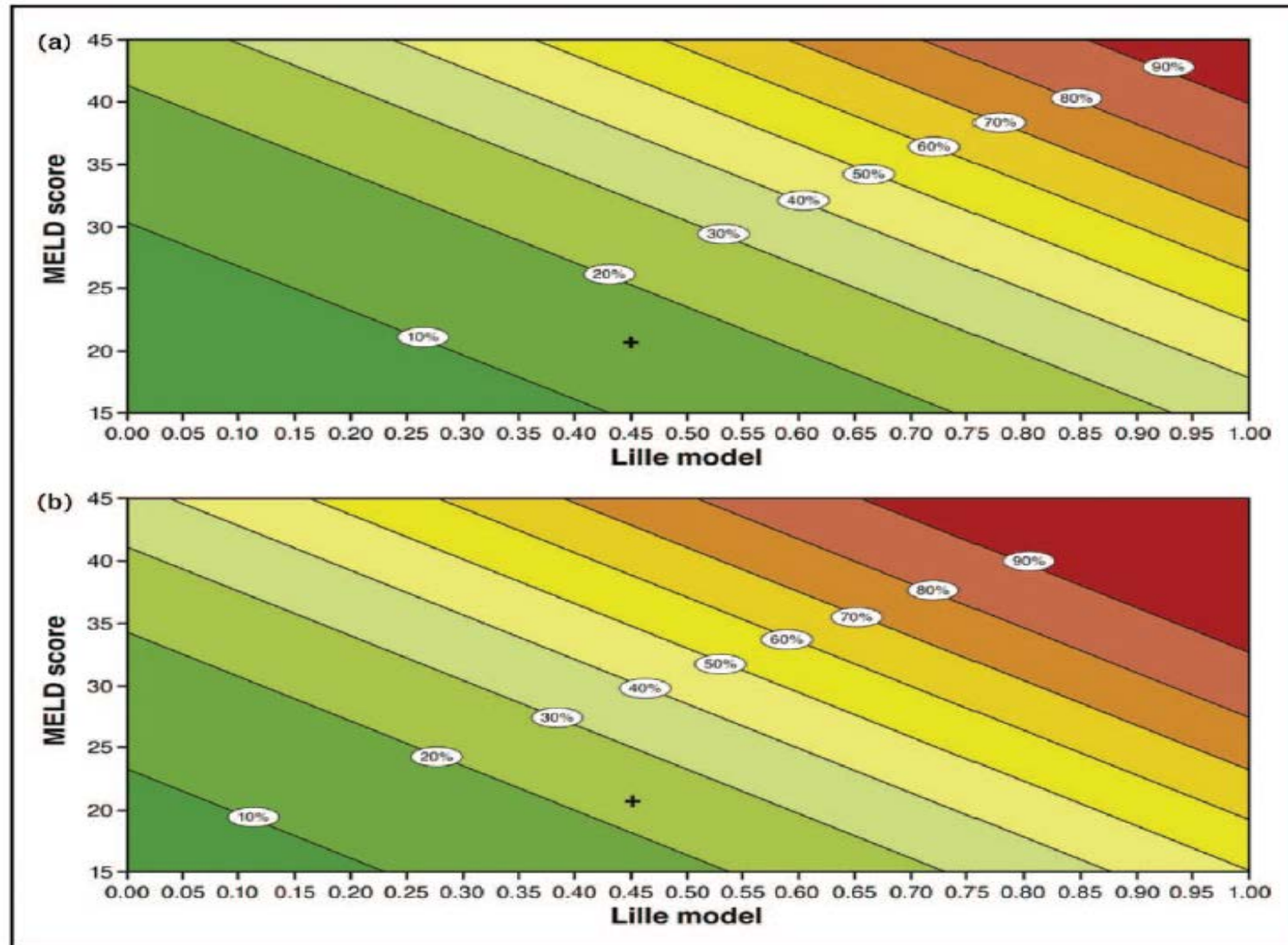


FIGURE 1. Joint-effect model (MELD + Lille score) to predict 2-month and 6-month mortality in alcoholic hepatitis. (a) Two-month mortality by joint-effect model combining Lille and MELD scores. (b) Six-month mortality by joint-effect model combining Lille and MELD scores. Reproduced from Louvet and Labreuche *et al.* [20] with permission from Dr Philippe Mathurin and publisher.

ORIGINAL ARTICLE

Early Liver Transplantation for Severe Alcoholic Hepatitis

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Didier Samuel, M.D., Ph.D., Jérôme Dumortier, M.D., Ph.D., Julia Salleron, M.S.,
François Durand, M.D., Ph.D., Hélène Castel, M.D., Alain Duhamel, M.D., Ph.D.,
Georges-Philippe Pageaux, M.D., Ph.D., Vincent Leroy, M.D., Ph.D.,
Sébastien Dharancy, M.D., Ph.D., Alexandre Louvet, M.D., Ph.D.,
Emmanuel Boleslawski, M.D., Ph.D., Valerio Lucidi, M.D., Thierry Gustot, M.D., Ph.D.,
Claire Francoz, M.D., Christian Letoublon, M.D., Denis Castaing, M.D.,
Jacques Belghiti, M.D., Vincent Donckier, M.D., Ph.D.,
François-René Pruvot, M.D., and Jean-Charles Duclos-Vallée, M.D., Ph.D.

BACKGROUND

A 6-month abstinence from alcohol is usually required before patients with severe alcoholic hepatitis are considered for liver transplantation. Patients whose hepatitis is not responding to medical therapy have a 6-month survival rate of approximately 30%. Since most alcoholic hepatitis deaths occur within 2 months, early liver transplantation is attractive but controversial.

RESULTS

In all, 26 patients with severe alcoholic hepatitis at high risk of death (median Lille score, 0.88) were selected and placed on the list for a liver transplant within a median of 13 days after nonresponse to medical therapy. Fewer than 2% of patients admitted for an episode of severe alcoholic hepatitis were selected. The centers used 2.9% of available grafts for this indication. The cumulative 6-month survival rate (\pm SE) was higher among patients who received early transplantation than among those who did not ($77\pm 8\%$ vs. $23\pm 8\%$, $P<0.001$). This benefit of early transplantation was maintained through 2 years of follow-up (hazard ratio, 6.08; $P=0.004$). Three patients resumed drinking alcohol: one at 720 days, one at 740 days, and one at 1140 days after transplantation.

Liver Transplantation for Severe Alcoholic Hepatitis, Updated Lessons from the World's Largest Series

J Am Coll Surg Vol. 226, No. 4, April 2018

Sharon R Weeks, MD, Zhaoli Sun, MD, PhD, Mary E McCaul, PhD, Heng Zhu, PhD, Robert A Anders, MD, PhD, Benjamin Philosophe, MD, PhD, Shane E Ottmann, MD, FACS, Jacqueline M Garonzik Wang, MD, PhD, Ahmet O Gurakar, MD, Andrew M Cameron, MD, PhD, FACS

STUDY DESIGN: Forty-six carefully selected patients with SAH underwent liver transplantation from October 2012 through July 2017; none had been abstinent for 6 months. We also examined 34 patients with alcoholic cirrhosis who received liver transplants under standard protocols with at least 6 months sobriety. We identified patient characteristics and primary outcomes of patient and graft survival, as well as alcohol recidivism. Secondary outcomes included post-transplantation infection, malignancy, and rejection.

RESULTS: Compared with patients with alcoholic cirrhosis, SAH patients were younger and with shorter drinking history and higher Model for End-Stage Liver Disease scores at listing and at transplantation. Of these patients, 46% received preoperative steroids; all were nonresponders by Lille score. At a median follow-up time of 532 days (interquartile range 281 to 998 days), there were no significant differences between groups by log-rank testing of Kaplan-Meier estimates for patient and graft survival or alcohol recidivism.

CONCLUSIONS: In the largest cohort of patients reported, outcomes after liver transplantation for SAH had excellent 1-year outcomes, similar to those seen in patients who received transplants with 6 months of sobriety. Recidivism was similar in the 2 groups. Early liver transplantation for SAH represents life-saving therapy for patients with otherwise high mortality, calling into question the utility of the 6-month rule in predicting outcomes in patients receiving transplants for alcoholic liver disease. (*J Am Coll Surg* 2018;226:549–557. © 2018 by the American College of Surgeons. Published by Elsevier Inc. All rights reserved.)

Liver Transplantation for Severe Alcoholic Hepatitis, Updated Lessons from the World's Largest Series

Sharon R Weeks, MD, Zhaoli Sun, MD, PhD, Mary E McCaul, PhD, Heng Zhu, PhD, Robert A Anders, MD, PhD, Benjamin Philosophe, MD, PhD, Shane E Ottmann, MD, FACS, Jacqueline M Garonzik Wang, MD, PhD, Ahmet O Gurakar, MD, Andrew M Cameron, MD, PhD, FACS

As we reported previously, our study differs from Mathurin and colleagues⁹ in inclusion criteria for SAH patients, which is more expansive. We included patients with a previous diagnosis of mental health disorder, provided it was well managed and they met other criteria.

However, in review of explant pathology, this group appears to be heterogeneous in nature. Approximately half of patients with a clinical SAH presentation demonstrated evidence of acute liver injury and inflammation on explant pathology, and nearly all demonstrated evidence of chronic injury. Even in pa-

At a median follow-up time of 532 days post transplantation (IQR 281 to 998 days),

Overall relapse to any alcohol consumption was 24% for patients in the cirrhotic group and 28% for SAH patients ($p = 0.8$). A higher percentage of SAH patients returned to harmful drinking patterns when compared with cirrhotic patients, but this difference was not significant (17% and 12%, respectively; $p = 0.5$).

Three-year Results of a Pilot Program in Early Liver Transplantation for Severe Alcoholic Hepatitis

Brian P. Lee, MD,* Po-Hung Chen, MD,* Christine Haugen, MD,† Ruben Hernaez, MD, PhD,* Ahmet Gurakar, MD,* Benjamin Philosophe, MD, PhD,† Nabil Dagher, MD,† Samantha A. Moore, BA,† Zhiping Li, MD,* and Andrew M. Cameron, MD, PhD†

Mathurin et al's⁸ study had an exceptionally restrictive selection process, where less than 2% of considered patients were included. Exclusion of patients with history of psychiatric disease even if medically well-managed raises concern for generalizability of results, particularly with the high coexistence with alcoholism.¹⁶

Although our results quote a selection rate of 6.3%, we caution that this number is possibly inflated by the fact that all patients except two were referred by an outside hospital who were presumably already preselected by their outside providers.

The portion of organs allocated towards early LT was higher than the Mathurin et al experience (7.4% vs 2.9%), which may be attributable to our center's expansion of inclusion criteria (eg,

(Ann Surg 2017;265:20–29)

Impact of a First Study of Early Transplantation in Acute Alcoholic Hepatitis: Results of a Nationwide Survey in French Liver Transplantation Programs

LT FOR AAH BEFORE AND AFTER 2011

The majority of centers (88%) declared they had changed their approach concerning AAH since 2011. Before 2011, 65% of centers had never performed LT in this indication, whereas 35% declared they had performed 1 (24%) or between 2 and 4 LTs (11%) for AAH each year, on a sporadic basis.

EDITORIAL

Liver Transplantation for Alcoholic Hepatitis: Being Consistent About Where to Set the Bar

"We transplant humans, not angels."⁽¹⁾

—James Neuberger in *The Guardian* 2014

Applying the normal transplant principles, if there is a high mortality without transplantation and the patient is not too sick to survive the early posttransplant period, then liver transplantation should be considered

LT FOR ALCOHOLIC CIRRHOSIS EXCLUDING AAH

Although a majority of centers (76%) declared that they applied the 6-month abstinence rule when listing patients before 2011, 65% moved to a 3-month rule after 2011, with only 29% retaining the 6-month rule as a fundamental management principle. Before 2011, the 6-month abstinence rule to consider LT in patients with cirrhosis (with acute-on-chronic liver failure and without AAH) was 6 months in 29% of centers and between 3 and 6 months in 65%. After 2011, only 12% of centers continued to apply the 6-month abstinence rule: the minimum period of abstinence fell to 3-6 months or even to 1-2 months in 59% and 29% of centers, respectively. This means that 46% of centers reduced the duration of abstinence required before LT

Early liver transplantation for alcoholic hepatitis: Ready for primetime?

Maddie Kubiliun¹, Suraj J. Patel^{2,3}, Chin Hur^{2,3}, Jules L. Dienstag^{2,3}, Jay Luther^{2,3,*}

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The time has arrived for all liver transplantation programs to re-evaluate their stance on early transplantation candidacy for patients with AH. Such a shift in practice and the accompanying need to overcome the inertia of our current practice, can be a difficult and laborious process. Although early liver transplantation will likely benefit a minority of patients with AH who demonstrate favorable medical and psychosocial attributes, the challenges are amplified further by the stubbornly persistent shortage of, and competition for, donor organs and the resulting deaths while on the waiting list of many patients with other liver diseases. Still, ethical considerations of justice and equity compel us to engage in evidence-based discussions of whether our current practice is appropriate and, if not, to fix it.

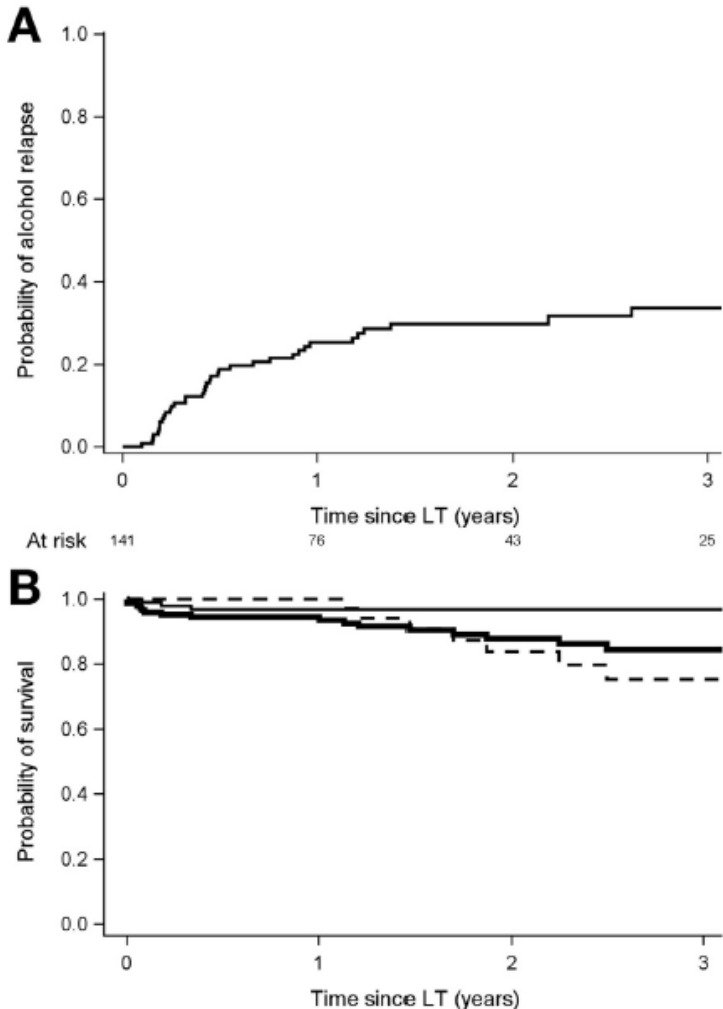
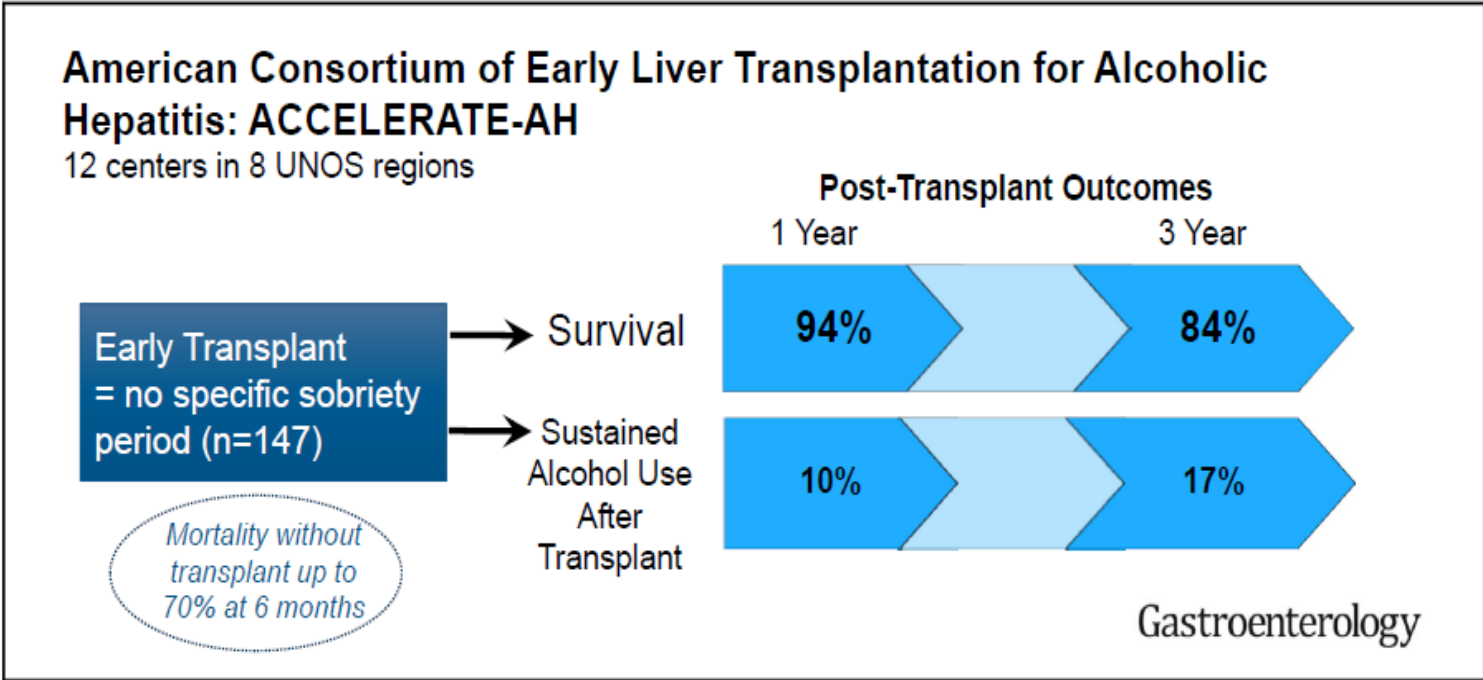
Table 1. Reports of early liver transplantation for severe alcoholic hepatitis.

	Early liver transplantation for severe alcoholic hepatitis (NEJM 2011) ⁵	Early liver transplantation for severe alcoholic hepatitis in the United States (American Journal of Transplantation 2016) ⁶	Three-year results of a pilot program in early liver transplantation for severe alcoholic hepatitis (Annals of Surgery 2017) ⁷
Number of patients transplanted	26	9	17
Control group	Non-responders and responders to medical therapy who did not undergo LT [delete period]	Non-responders to medical therapy who did not undergo transplantation	Transplanted patients with cirrhosis and ≥ 6 months abstinence from alcohol
Inclusion criteria	<ol style="list-style-type: none"> 1. Non-responders to medical therapy 2. Severe AH as first liver decompensating event 3. Presence of close supportive family members 4. Absence of severe coexisting or psychiatric disorders 5. Agreement by patients to adhere to lifelong total alcohol abstinence 	<ol style="list-style-type: none"> 1. Non-responders to medical therapy 2. Severe AH as patient's first liver-decompensating event 3. Presence of good social support 4. Favorable psychosocial profile suggesting low risk of alcohol relapse 5. Signed agreement to lifelong abstinence 6. Full consensus agreement by transplant committee 	<ol style="list-style-type: none"> 1. Severe AH as first liver-decompensating event 2. Failure of medical management 3. Commitment to lifelong adherence to alcohol abstinence 4. Strong social support 5. Rigorous assessment of possible risk factors for alcohol relapse 6. Absence of severe comorbid medical issues 7. If history of psychiatric disease, assessment of stable psychiatric disease 8. Full consensus agreement by transplant committee
Mortality rate			
1-month	N/R	1% for LT, 66% for control	N/R
6-month	23% for LT, 77% for control	11% for LT, 89% for control	0% for LT, 11.5% for control
24-month	29% for LT, 77% for control	N/R	N/R
Frequency of post liver transplant follow-up visits	median of 11 visits during 6-month period	median of 14 visits during 6-month period	median of 10 visits during 6-month period
Nature of follow up and factors assessed	Alcohol use was assessed at short intervals during informal interviews of patients and their families. Any use was considered inappropriate. In case of relapse – frequency, type of alcohol, and amount were recorded.	All transplant recipients enrolled in alcohol rehabilitation programs when deemed medically feasible by their hepatologist (median 130 days after liver transplantation). Random urine ethyl glucuronide testing.	Given resources and actively encouraged to participate in formal abstinence support programs. Asked at each follow-up visit via informal questioning about whether they had any alcohol relapse. Supplemented by random alcohol testing at provider discretion.
Number of relapses			
6-month	0	0	3
Long-term	3 (by day 1,140 post-LT)	2 (by day 260 post-LT) ¹	1
Factors that predicted relapse	N/R	None identified	HPSS Score
% of liver transplants	2.9	3.0	7.4
Median time on transplant list (days)	9	5	N/R
Median MELD at time of listing	34	39	37

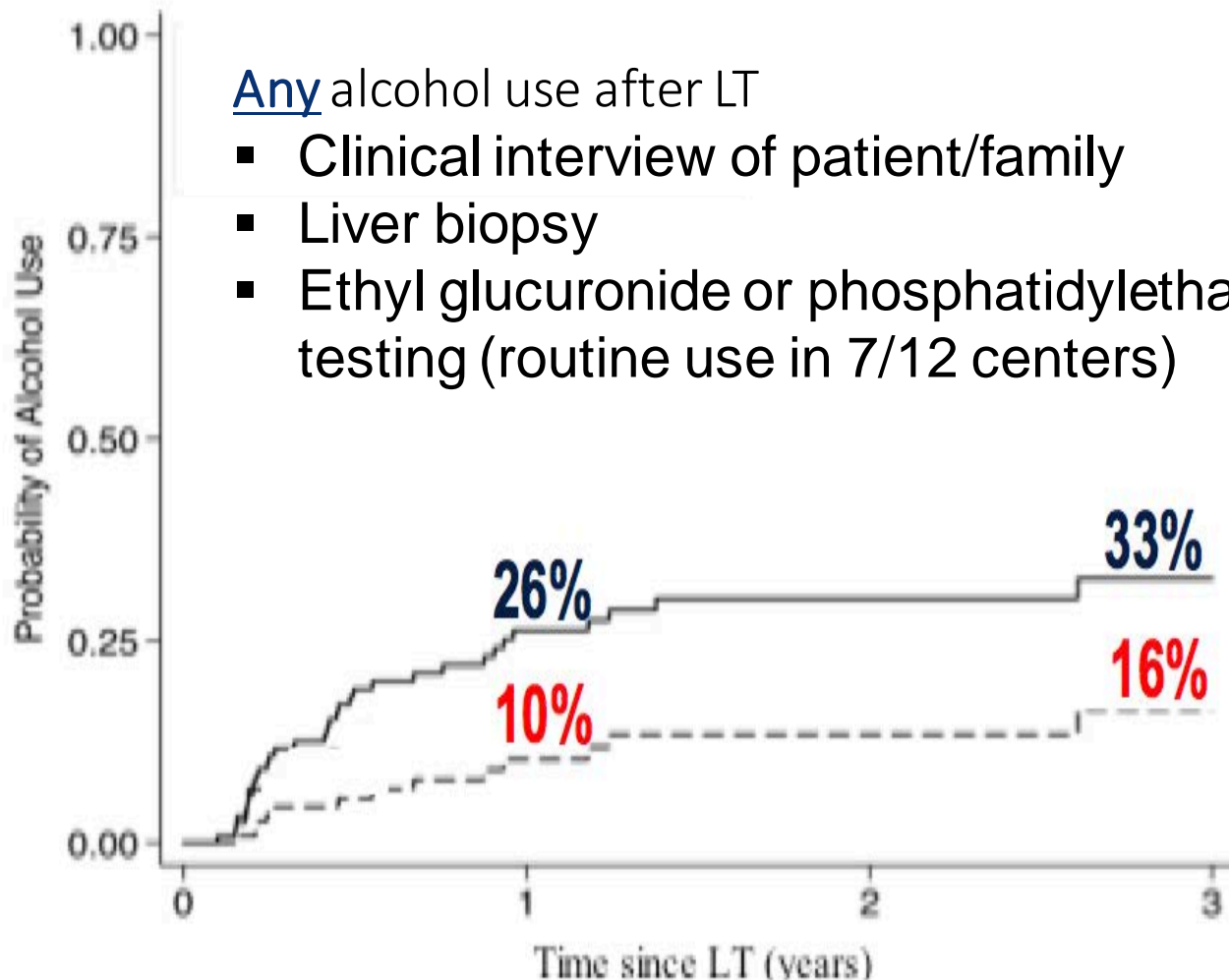
AH, alcohol-associated hepatitis; HPSS, Hopkin's psychosocial scale; LT, liver transplantation; MELD, model for end-stage liver disease; N/R, not reported.

Outcomes of Early Liver Transplantation for Patients With Severe Alcoholic Hepatitis

Brian P. Lee,¹ Neil Mehta,¹ Laura Platt,² Ahmet Gurakar,² John P. Rice,³ Michael R. Lucey,³ Gene Y. Im,⁴ George Therapondos,⁵ Hyosun Han,⁶ David W. Victor,⁷ Oren K. Fix,⁸ Lianne Dinges,⁸ Deepti Dronamraju,⁹ Christine Hsu,¹⁰ Michael D. Voigt,¹¹ Mary E. Rinella,¹² Haripriya Maddur,¹² Sheila Eswaran,¹³ Jessica Hause,¹³ David Foley,³ R. Mark Ghobrial,⁷ Jennifer L. Dodge,¹ Zhiping Li,² and Norah A. Terrault¹



Alcohol Use after Liver Transplant



Any alcohol use after LT

- Clinical interview of patient/family
- Liver biopsy
- Ethyl glucuronide or phosphatidylethanol testing (routine use in 7/12 centers)

- Non-Sustained = alcohol use, but stopped drinking at last follow-up
 - Not associated with significantly higher risk of death (HR=1.61, p=0.32)
- Sustained alcohol use = still drinking at last follow-up + duration of alcohol >100 days
 - 4.6-fold higher risk of death (p=0.01)

ACCELERATE - Lee BP *et al*, Gastroenterology 2018

Predicting low-risk for sustained alcohol use after early transplant for alcoholic hepatitis: The SALT score

Aim:

The American Consortium of Early Liver Transplantation for Alcoholic Hepatitis (ACCELERATE-AH) aimed to develop a predictive tool to identify patients with alcoholic hepatitis (AH) before liver transplant (LT) at low-risk for sustained alcohol use after LT to inform selection of candidates for early LT.

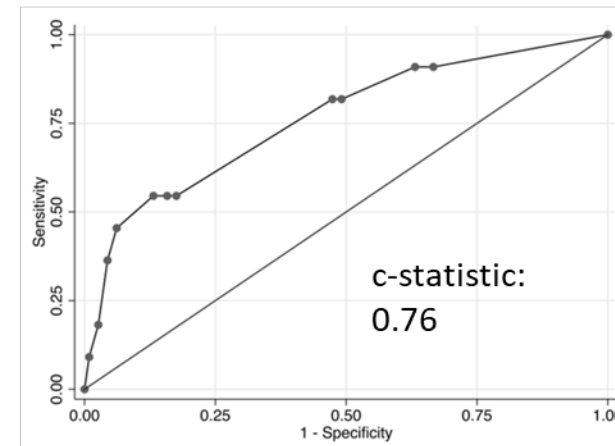
Methods:

- 134 ACCELERATE-AH LT recipients between 2012-2017
- LASSO regression to identify variables, and generate a point-score to predict low-risk for sustained alcohol use post-LT

Conclusions:

A novel prognostic score, the SALT score, using four objective pre-LT variables identifies AH candidates for early LT at low-risk for sustained alcohol use post-LT – SALT (cutoff of ≥ 5) had a 95% negative predictive value.

SALT Variable	Points
>10 Drinks/Day at Presentation	+4
≥ 2 Prior Failed Rehabilitation Attempts	+4
Any History of Prior Alcohol-Related Legal Issues	+2
History of Non-THC Illicit Substance Abuse	+1



- Ranges 0-11
- Cutoff of 5
 - NPV: 95%, PPV: 25%
- Maximum score (11), PPV 50%
- Internal cross-validation across 10 random groups
 - Average c-statistic = 0.74
- HRAR c-statistic: 0.56

Lee BP, et al., Abstract 12

Early Liver Transplantation for Patients With Acute Alcoholic Hepatitis: Public Views and the Effects on Organ Donation

G. Stroh¹, T. Rosell², F. Dong³ and J. Forster^{4,*}

Patients with severe acute alcoholic hepatitis may not survive to fulfill the standard 6 months of abstinence and counseling prior to transplantation. A prospective study demonstrated that early liver transplantation in such patients improved 2 year survival from 23% to 71% and only 3 of 26 patients returned to drinking after 1140 days; graft function was unaffected. Nonetheless, this treatment protocol may raise public concerns and affect organ donation rates. A total of 503 participants took a survey made available at an online crowdsourcing marketplace. The survey measured attitudes on liver transplantation generally and early transplantation for this patient population, in addition to measuring responses to nine vignettes describing fictional candidates. The majority of respondents (81.5%, n = 410) was at least neutral toward early transplantation for these patients; only a minority (26.3%) indicated that transplantation in any vignette would make them hesitant to donate their organs. Middle-aged patients with good social support and financial stability were viewed most favorably ($p < 0.001$). Age was considered the most important selection factor and financial stability the least important factor (each $p < 0.001$). Results indicate early transplantation for carefully selected patients with acute alcoholic hepatitis may not be as controversial to the public as previously thought.

The use of an online survey introduces several limitations to this study. Because respondents can search and choose which surveys they complete, the sample included a high proportion of respondents who had some level of experience or involvement in organ transplantation. This could influence how respondents view transplantation,

Another potential limitation of this study is the relatively high prevalence of respondents with a prior DUI (5.8%). However, the only difference in responses by history of DUI(s) was that those with a prior DUI were less likely to intend to donate their organs. Importantly, there were no differences in views of eLT or hesitancy to donate organs if eLT were performed when comparing those with and without a prior DUI. Despite the relatively high rate of responders with DUIs, the overall prevalence of binge drinking in this survey population was lower than that nationally (12.7% vs. 18.4%) (15). Also, the only difference in responses by binge-drinking status was that abstainers were less likely to donate their organs than non-binge drinkers (and less likely, also, than binge drinkers, although not significantly).

Survey of Liver Transplantation Practices for Severe Acute Alcoholic Hepatitis

Saroja Bangaru,¹ Mark R. Pedersen,¹ Malcolm P. MacConmara,² Amit G. Singal,¹ and Arjmand R. Mufti¹

¹Division of Digestive and Liver Diseases, Department of Internal Medicine and ²Division of Surgical Transplantation, Department of Surgery, University of Texas Southwestern Medical Center, Dallas, TX

Liver transplantation (LT) has a demonstrated survival benefit in select patients with severe acute alcoholic hepatitis (SAH) who do not respond to steroids, but prior studies suggest low adoption among US LT centers. Our study explored current perceptions and practice patterns of LT for SAH in the United States. We administered a Web-based survey to medical directors of US LT centers between May and October of 2017 to characterize practice patterns and perceptions of LT for SAH. We obtained responses from 45 (41.3%) of 109 surveyed centers, representing all 11 (100%) United Network for Organ Sharing regions. Half (n = 23; 51.1%) reported performing at least 1 LT for SAH, although most (n = 19; 82.6%) of those had performed ≤ 5 LTs for that indication. Centers expressed near consensus for selection criteria, requiring strong social support (100%), no prior presentations with SAH (91.3%), absence of a severe coexisting psychiatric disorder (91.3%), and official psychosocial evaluation (87.0%). Reported posttransplant survival of SAH patients was excellent, with 17 (73.9%) centers reporting 1-year posttransplant survival exceeding 90%. Among centers that had not performed LT for SAH, the most commonly cited reason was perceived high risk of alcohol relapse. In conclusion, our data demonstrate that LT is increasingly adopted as a therapeutic intervention for patients with SAH and that careful selection allows for excellent 1-year posttransplant survival. Despite this, nearly half of US centers do not perform LT for this indication due to perceived high risk of alcohol relapse. Our data support the use of LT for well-selected patients with SAH.

Liver Transplantation 24 1357–1362 2018 AASLD.

Received March 13, 2018; accepted May 16, 2018.

Ethical Considerations

Four Principles in Medical Ethics

Beneficence

Non-maleficence

Justice

Patient autonomy

*Remember that one principle may trump another under specific circumstances

Justice: to each according to...

...equal share

...need

...effort

...contributions

...merit

...ability to pay

*May need to balance socialism vs capitalism

Justice: other considerations

Health (WHO definition): a state of complete physical, mental, and social well being, and not merely the absence of infirmity

Compensatory justice: recent cases where cigarette smokers have received compensation from tobacco companies for their lung cancer or emphysema suggest that this is a large issue

When a large number of wounded soldiers require medical attention, they are classified according to diagnosis and prognosis, and then prioritized; Israeli Field Hospital (NEJM 2010/Ann Int Med 2010) “patients receiving care not the most severely injured, but those deemed most likely to benefit from treatment”

The “walking wounded” and the hopeless cases ‘wait’ ...

...according to...

...social utility: emergency caregivers should receive priority treatment after a terrorist attack, because they can in turn provide medical care to others

...impersonal mechanism of queuing (first-come-first-served)

...Lottery

Should patients with alcoholic liver disease be given lower priority for a liver transplant than those with non-alcoholic liver disease?

Patients with alcoholic cirrhosis deserve lower priority for receiving transplants because they bear some responsibility for their condition

The lower priority is not a punishment, but rather reaffirming responsibility for their autonomous choices

Alcoholics should have lower priority because the survival rate is lower owing to a fairly high probability of relapse into alcohol abuse

Alcoholics should have lower priority because their moral vice of heavy drinking makes them more responsible for their condition

But, it is generally wrong to deny medical care because of patient's lifestyle; moral evaluation of patients of any sort should be excluded from consideration of who should be treated for any condition including liver disease; alcoholism is a disease

Study	# of Patients	Months of Followup After OLT	Survival (%)				Patients Who Relapsed (%)	Graft Loss Due to Relapse (%)	Deaths Related to Relapse (%)
			1-yr	2-yr	3-yr	4-yr			
Starzl et al.	41	12-36	73	-	-	-	3	3	3
Kumar et al.	73	25	74	-	-	-	11.5	2	2
Bird et al.	24	4-84	66	-	-	-	22	17	0
Stevens et al.	10	1-24	-	-	-	-	0	0	0
Knechtle et al.	41	N/A	83	-	-	71	13	0	0
Gish et al.	29	12-41	93	-	-	-	21	-	0
Berlakovich et al.	58	33	71	66	-	63	31	16	3.4
Raakow et al.	78	0.5-64	96	96	-	85	22	-	2.6
Gerhardt et al.	67	36-96	90	84	82	76	49	N/A	4.5
Tringali et al.	103	18-46	-	-	-	-	21	N/A	N/A
Zibari et al.	42	N/A	74	71	71	-	7	0	0
Lucey et al.	59	6-89	80	-	-	77	34	N/A	2
Foster et al.	84	28-70	79	75	-	-	21	17	5
Anand et al.	39	7-63	79	-	-	79	13	2.6	0
Tang et al.	71	NA	83	80	-	-	48	N/A	1.4
Pageaux et al.	53	42	75	69	67	62	32	-	-

Patient is morally responsible for his/her condition just in case he/she is able to exercise the control

Abusive upbringing

Extreme poverty

Must have cognitive capacity to foresee diseased condition at a later time as the likely consequences of his/her autonomous preferences

Causal sensitivity is a necessary condition for causal control over one's health

When the person begins to drink at an earlier time, he/she must know that his/her behavior may result in having a lower priority to receive treatment for his/her disease

Alcoholism is a disease: to what extent...

...Do genetics affect likelihood to become an alcoholic?

...Did environmental factors external to the individual (e.g. abusive upbringing, alcoholic parents, etc.) play a causal role?

...Did the patient's own autonomous choices and actions causally contribute to the disease?

Conclusions

The '6-month abstinence rule' has never been truly validated; patients with severe alcoholic hepatitis (SAH) who survive 6 months don't usually need a LT

1-year survival following LT for SAH is >90% compared to <30% with treatment f

The percent of patients with SAH 'accepted' for LT has increased worldwide since the French-Belgian study in 2011, as has the percent of liver grafts used for this indication; practice appears to also affect LT rates for alcoholic cirrhosis

Public acceptance does not appear to be strongly against this practice, but the data to support this are weak

The relapse rate following LT is variable; the definition of 'relapse' is important; the rate of relapse is higher as restrictions loosen and appears to be increasing

A prospective evaluation and validation of the SALT score (≥ 5 , 95% NPV) seems essential

Acknowledgments

Dr. Haripriya Maddur

Dr. Justin Boike

Thank you

CCMC Ethics credit is approved for this course. The CCMC Code of Professional Conduct will be referenced in this presentation. View the CCMC Code of Professional Conduct [here](#).