

Alcohol relapse after liver transplantation for alcoholic liver disease

삼성서울병원 내과

*정혜교, 신동현

Background/Aims: Alcoholic liver disease (ALD) is a common cause of liver cirrhosis and indication for liver transplantation (LT). Six-month sobriety before transplantation is typically recommended. However, controversies exist over the “6-month abstinence rule,” and some patients receive LT without fulfilling six-month sobriety. We analyzed alcohol relapse among ALD patients who received LT according to donor type and abstinence period before LT. **Methods:** We analyzed 129 patients [mean: 50.68±9.20 years, male: 78.3%] who underwent LT between Jan. 2000 and Jul. 2017 for ALD at Samsung Medical Center, Seoul, Korea. **Results:** Alcohol relapse was identified in 33 patients (25.6%) during follow-up. Donor type [deceased donor (DDLT) vs. living donor (LDLT)], abstinence period (<6 months vs. ≥6 months), and smoking status (current vs. never/ex-smoker) were independent factors associated with alcohol relapse. Current smoker without six-month sobriety who received DDLT had the highest alcohol relapse rate (54.5% at 3 years), while alcohol relapse rate was the lowest for never/ex-smoker with six-month sobriety who received LDLT (4.3% at 3 years). Notably, alcohol relapse rate showed marginal difference according to abstinence period (<3 months vs. ≥3 months) in DDLT (38.8% vs. 18.7% at 3 years, $p=0.065$), while it showed no difference who received LDLT (17.7% vs. 11.6% at 3 years, $p=0.92$). For those who received LDLT, alcohol relapse rate was the lowest when the donors were spouses (12.5%), followed by children (25.0%) and siblings (27.3%), although the rate was not statistically different ($p=0.61$). **Conclusions:** Alcohol relapse was frequent, especially for current smokers without a sobriety period who received DDLT. A sobriety period was not associated with alcohol relapse in LDLT, suggesting that sobriety period may not be an absolute contraindication when considering LDLT for ALD. In contrast, lack of sobriety period was associated with alcohol relapse in DDLT, indicating that requirement of a sobriety period should be considered when considering DDLT.

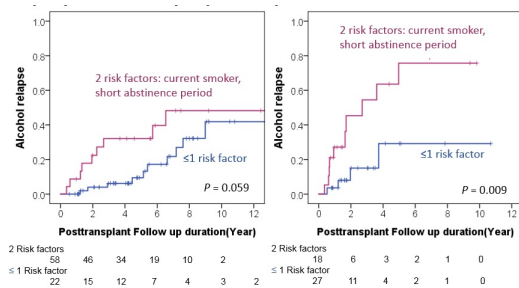


Figure 1. Kaplan-Meier estimates of alcohol relapse according to number of risk factors in recipients. Risk factors include alcohol consumption within 6 months, current smoker at transplantation A. Living donor transplantation recipients B. Deceased donor transplantation recipients

Variables	Overall (n=129)	Relapse (+) (n=33)	Relapse (-) (n=96)	P value	DDLT (n=47)	LDLT (n=82)	P value
Age (years)	50.68 ± 9.20	45.67 ± 9.65	51.05 ± 9.01	0.46	47.47 ± 9.93	52.52 ± 8.26	0.002
Male	101 (78.3)	29 (87.9)	72 (75.0)	0.12	32 (68.1)	69 (84.1)	0.034
Abstinence period (months)	3.2 (0.1 - 295.4)	2.4 (0.1 - 36.0)	5.0 (0.1 - 295.4)		1.6 (0.1 - 229.3)	6.6 (0.1 - 295.4)	
< 3 months	61 (47.3)	30 (90.9)	31 (32.3)	0.05	25 (53.2)	24 (29.3)	0.011
3 - 6 months	14 (10.9)	5 (15.2)	9 (9.4)		10 (21.3)	16 (19.5)	
> 6 months	54 (41.8)	12 (36.0)	42 (43.7)		12 (25.5)	42 (51.2)	
Smoking status				0.003			0.87
Current smoker	62 (48.1)	24 (72.7)	38 (39.6)		24 (51.1)	38 (46.3)	
Ex-smoker	32 (24.8)	3 (9.1)	29 (30.2)		11 (23.4)	21 (25.6)	
Never-smoker	35 (27.1)	6 (18.2)	29 (30.2)		12 (25.5)	23 (28.0)	
Marital status				0.33			0.004
Single	8 (6.2)	1 (3.0)	7 (7.3)		7 (14.5)	1 (1.2)	
Married	108 (83.7)	29 (87.9)	79 (82.3)		34 (72.3)	74 (90.2)	
Divorced	9 (7.0)	1 (3.0)	8 (8.3)		3 (6.4)	6 (7.3)	
Separated	3 (2.3)	2 (6.1)	1 (1.0)		2 (4.3)	1 (1.2)	
Widowed	1 (0.8)	1 (3.0)	0		1 (2.1)	0	
Children	118 (91.5)	30 (90.9)	88 (91.7)	0.89	39 (83.0)	79 (96.3)	0.009
Liver status				0.24			0.007
Decompensated LC	85 (65.9)	19 (57.6)	66 (68.8)		24 (51.1)	61 (74.4)	
Severe alcoholic hepatitis	44 (34.1)	14 (42.4)	30 (31.3)		23 (48.9)	21 (25.6)	
Hepatocellular carcinoma	26 (20.2)	6 (18.2)	20 (20.8)	0.74	3 (6.4)	23 (28.0)	0.003
History of varicella	48 (37.2)	14 (42.4)	34 (35.4)	0.47	18 (38.3)	30 (36.6)	0.847
History of refractory ascites	66 (51.2)	16 (48.5)	50 (52.1)	0.72	28 (59.6)	38 (46.3)	0.149
History of hepatic encephalopathy	58 (45.0)	17 (51.5)	41 (42.7)	0.38	21 (44.7)	37 (45.1)	0.96
History of any clinical feature of decompensation	106 (82.2)	28 (84.8)	78 (81.3)	0.64	37 (78.7)	69 (84.1)	0.44
Donor type				0.41			
DDLT	47 (36.4)	14 (42.4)	33 (34.4)				
LDLT	82 (63.6)	19 (57.6)	63 (65.6)				
Spouse	8/82 (9.8)	1/19 (5.3)	7/63 (11.1)				
Children	60/82 (73.2)	15/19 (78.9)	45/63 (71.4)				
Siblings	11/82 (13.4)	3/19 (15.8)	8/63 (12.7)				
Other relatives	3/82 (3.7)	0/0	3/63 (4.8)				

Numbers are expressed as mean ± standard deviation or median (range). Categorical variables are expressed as number (percentage). Abbreviation: DDLT, deceased donor liver transplantation; LDLT, living donor liver transplantation; LC, liver cirrhosis.

저자 요청 취소