

SO029 FIRST YEAR RENAL OUTCOME OF TRANSPLANTATIONS OF KIDNEYS FROM HEPATITIS C INFECTED DONORS TO HEPATITIS C NEGATIVE RECIPIENTS

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Background and Aims: Transplant centers in US are increasingly willing to transplant kidneys from hepatitis C infected donors to hepatitis C negative recipients. Long-term renal outcome data from non-prophylactic treatment approach outside clinical trials is missing.

Method: We compared kidney graft function of 132 hepatitis C negative recipients, who received HCV infected (NAT+ and antibody+/-; HCV+) versus HCV negative (NAT- and antibody-; HCV-) in 2018, in a single center, retrospective, observational study. Categorical variables were compared using χ^2 tests and continuous variables were compared using t-tests or Mann-Whitney U-tests, as appropriate. Linear regression was applied to assess independent association between graft function and HCV viremic status.

Results: The mean \pm SD age of recipients was 52 \pm 11 years, 44% were female, 20% and 79% of recipients were Caucasian and African-American, respectively. Baseline characteristics were similar between HCV+ vs HCV- groups, except dialysis duration, donors race, KDPI and cold ischemic time (Table). The DGF rate, estimated GFRs at post-transplant 3, 6, 9 and 12 months was similar between HCV+ and HCV- groups (Table). HCV viremic status was not a predictor of 3, 6, 9 and 12 months eGFR in our unadjusted model and after adjustment for donor and recipient characteristics.

Conclusion: Recipients of HCV-viremic kidneys have similar renal allograft function in the first year after transplantation compared to those who received from HCV-non-viremic kidneys.

Table:

Parameter	Entire cohort	HCV+	HCV-	P-value
Observations (n)	132	73	59	
<i>Recipient baseline characteristics</i>				
Age (years), mean (SD)	52 (11)	52 (11)	52 (12)	0.86
Female gender, N, (%)	58 (44%)	30 (41%)	28 (47%)	0.46
<i>Race, N, (%)</i>				
Caucasian	27 (20%)	14 (19%)	13 (22%)	0.62
African American	104 (79%)	58 (80%)	46 (78%)	
Other	1 (1%)	1 (1%)	0 (0%)	
Dialysis duration (months), median (IQR)	60 (37-87)	49 (30-75)	71 (50-98)	<0.01
<i>Comorbidity, N, (%)</i>				
Diabetes	61 (46%)	36 (49%)	25 (42%)	0.43
Hypertension	128 (97%)	71 (97%)	57 (97%)	0.83
Peripheral vascular disease	9 (7%)	8 (11%)	1 (2%)	0.04
Coronary artery disease	21 (16%)	11 (15%)	10 (17%)	0.74
Chronic obstructive pulmonary disease	8 (6%)	5 (7%)	3 (5%)	0.67
<i>Donor Characteristics</i>				
Age (years), mean (SD)	33 (10)	32 (5)	34 (13)	0.17
Female gender, N, (%)	60 (45%)	37 (47%)	26 (44%)	0.77
DCD, N, (%)	18 (14%)	8 (11%)	10 (17%)	0.32
<i>Comorbidity, N, (%)</i>				

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Parameter	Entire cohort	HCV+	HCV-	P-value
Diabetes	2 (2%)	1 (1%)	1 (2%)	0.88
Hypertension	12 (9%)	6 (8%)	6 (10%)	0.70
<i>Race, N, (%)</i>				
Caucasian	107 (82%)	70 (96%)	37 (64%)	<0.01
African American	21 (16%)	0 (0%)	21 (36%)	
Other	3 (2%)	3 (4%)	0 (0%)	
KDPI, mean (SD)	45 (19)	50 (16)	38 (21)	<0.01
<i>Transplant characteristics</i>				
Cold Ischemic Time (hours), median (IQR)	18.2 (12.7-21.8)	19.3 (16.2-23.2)	15.3 (9.1-20.3)	<0.01
ATG dose (mg/kg), mean (SD)	4.9 (0.9)	4.8 (0.8)	5.0 (1.3)	0.25
<i>Renal Outcome Data</i>				
Delayed Graft Function, N, (%)	13 (10%)	6 (8%)	7 (12%)	0.49
Estimated GFR at 3 months after transplantation (ml/min), mean (SD)	63 (19)	63 (17)	64 (21)	0.76
Estimated GFR at 6 months after transplantation (ml/min), mean (SD)	66 (19)	66 (17)	66 (21)	0.97
Estimated GFR at 9 months after transplantation (ml/min), mean (SD)	66 (17)	66 (15)	67 (20)	0.61
Estimated GFR at 12 months after transplantation (ml/min), mean (SD)	65 (19)	65 (16)	66 (22)	0.65

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