

Kidney Transplantation from Hepatitis C Viremic Donor to Naive Recipients. A Case Series.

CY Teh¹, Premila P¹, Alexander CKY¹, HS Wong^{1,2}

1. Department of Nephrology, Hospital Selayang

2. Clinical Research Centre, Hospital Selayang

INTRODUCTION

Hepatitis C infection was an absolute contraindication for kidney donation in Malaysia. However, this paradigm changed with excellent sustained virologic response (SVR) from direct-acting antiviral agent therapy (DAA). Herein we report first two cases of such transplantation attempted in Malaysia.

Case 1

A 31-year-old man with end stage kidney disease (ESKD) due to unknown etiology has been on hemodialysis for 15 years. He received right kidney from a hepatitis C viremic deceased donor whose hepatitis C virus ribonucleic acid (HCV-RNA) was 6.94Log10IU/ml with genotype of 3. On postoperative day-2, he was tested positive with HCV-RNA of 1.9Log10IU/ml. Sofosbuvir and Velpatasvir were started 3 days later. He responded well with HCV-RNA not detected on day-14 of treatment. He completed 3-month course of DAA and remained SVR at 12 week and 24 weeks. His latest serum creatinine level is 115umol/L.

Date	Log10 (IU/ml)	Anti HCV
02.11.21	1.9	Non Reactive
05.11.21	4.09	Non Reactive
12.11.21	2.1	Non Reactive
19.11.21	Not Detected	Non Reactive
26.11.21	Not Detected	Non Reactive
03.12.21	Not Detected	Non Reactive
10.12.21	Not Detected	Non Reactive
17.12.21	Not Detected	Reactive
29.12.21	Not Detected	Reactive
24.12.21	Not Detected	Reactive
06.01.22	Not Detected	Reactive
09.05.22	Not Detected	Reactive

Case 2

A 35-year-old man with ESKD due to non-steroidal-anti-inflammatory-drug (NSAID) abuse has been on hemodialysis for 13 years. He received left kidney from the above-mentioned donor. He developed postoperative bleeding and complicated with delayed graft function. He was tested positive on day-2 post-operation and the aforementioned DAA regimen was started 10-days later. His HCV-RNA prior to DAA treatment was 7.17Log10IU/ml. HCV-RNA was not detected on day-35 of treatment and remained SVR at 12 week and 24 weeks. His latest serum creatinine level is 126umol/L.

Date	Log10 (IU/ml)	Anti HCV
02.11.21	2.48	Non Reactive
05.11.21	4.18	Non Reactive
09.11.21	6.95	Non Reactive
11.11.21	7.17	Non Reactive
18.11.21	3.94	Non Reactive
25.11.21	2.94	Non Reactive
02.12.21	1.42	Non Reactive
09.12.21	1.26	Reactive
16.12.21	<1.08	Reactive
22.12.21	<1.08	Reactive
24.12.21	<1.08	Reactive
06.01.22	<1.08	Reactive

CONCLUSION

Kidney transplantation from hepatitis C viremic donor is a potential and promising treatment option for ESKD population, thus should be considered in all eligible patients.