Professor Ying Dou

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Dear Professor Dr. Ying Dou

Thank you very much for taking your time to review our manuscript and your thoughtful comments on it. We are returning a revised manuscript which incorporates many of the suggestions made by reviewers. We have tried to revise the manuscript according to each of your comments and suggestions as much as we could. A response to the suggestions has been listed one by one, and an index of changes has been included.

Manuscript ID: #52939
Title: Successful Kidney Transplantation from an Expanded Criteria Donor with Long-Term ECMO Treatment: A Case Report

Major changes

1. Treatment: Information on the recipient of the opposite side of donor kidney was added.
2. Outcome and follow-up: Information on the recipient of the opposite side of donor kidney was added.
3. Discussion: Addition of limitation of this case report.
4. Discussion: addition of a section with brief summary of the case along with existing literature.

Minor changes

1. Correction of inadequate term.

Sincerely,

Tae Hyun Ban, MD

Division of Nephrology, Department of Internal Medicine,

Eunpyeong St. Mary's Hospital,

College of Medicine, The Catholic University of Korea,

1021 Tongil-ro, Eunpyeong-gu, 03312, Seoul, South Korea.

E-mail: deux0123@catholic.ac.kr

Telephone: 82-2-2030-4356, **Fax:** 82-2-2030-4641

Reviewer #1 (00503199)

Specific comments to authors

The authors should add a section on how this case report adds in the existing literature

Thank you for your comments. We added the following at the end of discussion section, just to briefly summarize up how this case report was evidenced by the existing literature.

➔ Consistent with recent reports[1-4], demonstrating that ECMO donors had no detrimental impact on long-term graft function and survival, this case showed favorable allograft function until the last follow-up even after long duration of ECMO treatment in the donor. Moreover, as suggested by some literature[5,6], our donor had several clinical features that could have confirmed such a favorable graft outcome. In other words, the donor renal function was acceptable as reflected by urine volume and serum creatinine at procurement despite the lack of pathologic information of the donor kidneys. Besides, good glycemic control over a short diabetic period was also in line with the existing literature[7].

References

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Reviewer #2 (05117991)

Specific comments to authors

This is a well written case report, I would like to know more about the other kidney of the donor. Was it transplanted? How did the clinical course of that recipient go?

We agreed with your opinion!

We added information on the recipient to opposite side kidney in T**reatment** and **Outcome and follow-up** section in case report.

➔ **Treatment:** On the other hand, the opposite side of donor kidney was transplanted to a 59-year-old male, with delivery of donor-related risk before the surgery. He underwent peritoneal dialysis for 12 years due to unknown primary renal disease, and was treated for status epilepticus three years ago and cerebral infarction a year earlier. The immunologic profile was HLA

mismatch number 4 with negative results of crossmatch test and panel reactive antibody.

The cold ischemic time of KT was 109 minutes and 123 minutes, respectively

➔ **Outcome and follow-up:** The other recipient also exhibited a slow recovery of allograft function. Urine volume was gradually increased with decrease in serum creatinine from 15.8 to 8.62 mg/dL. Allograft biopsy was performed owing to slow recovery of renal function on POD 7. The pathology showed diabetic nephropathy and calcineurin inhibitor toxicity without acute rejection, consistent with that of the opposite allograft. However, uncontrolled bleeding at renal artery anastomosis site was started on POD 10. Despite emergent allograft nephrectomy, bleeding was continued to cause multi-organ failure and disseminated intravascular coagulation. Finally he passed away on POD 16.

We revised the following terms in the first line of Outcome and follow-up section for a clear statement: "allograft function" to "allograft function of 69-year-old male recipient"

We added another limitation as follows, with regard to insufficient information on the opposite allograft function.

➔ **Discussion (limitation):** Next, the changes in the opposite allograft function was not confirmed due to death of the recipient. Nonetheless, up until the bleeding started, the allograft function gradually improved with increase in urine volume and decrease in serum creatinine, and the pathologic results from both recipients were the same without rejection of ischemic injury.