

Peer Review File

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Reviewer A

Comment1: The only thing I disagree with and suggest to change in the discussion is the issue of approach to further transplantation from adult donors for recipients with crdh.

Reply1: Considering the Reviewer's suggestion, we have changed this part.

Chang in the text: We have modified our text as advised(see Page 10 , line 225, and Page 12, line 274, in red). Special thanks to you for your good comments and we will try to do better.

Comment2: Such effective transplants have been described in the literature and perhaps more stringent post-operative control and modification of procedures are necessary in Your center.

Reply2: Given that some of the findings contradict previously published observations, we acknowledge those studies and further reviewed the literature about adult donor transplants for CRDH recipients and compared it with the two cases in our center.

We found that in the few reported cases, effective transplants for CRDH recipients were mainly from living adult donors. The hypotension was easily corrected after transplantation by modest doses of inotrope therapy given on critical care. In our center, two dialysis hypotension recipients both underwent cardiac death adult donor transplantations and received active pressor treatment. One had previous history of diabetes and vasopressor infusion was for 2 months after transplantation to maintain blood pressure. The other had radiofrequency ablation (ventricular premature beat) and left kidney nephrectomy (polycystic kidney) before transplantation. And vasopressor infusion was used for 1 month after surgery. Both of them underwent dialysis again after transplantation due to oliguria and poor recovery of kidney function and maintained dialysis after discharge. Unlike the two patients in our center, other cases mentioned in the literature have no such conditions. To sum up, donor type and preoperative condition of recipients might be the main reasons for the controversial outcome about adult donor transplantation for CRDH recipients. Additionally, the poor outcome in our center might also be related to other multiple reasons, such as preoperative evaluation and preparation, surgical technique, postoperative care and treatment.

In our center, all CRDH recipients received deceased donor transplants. As for them, we had a careful evaluation and also assessed the response to pressor therapy before surgery. And pressor therapy would be properly taken during and after operation according to our experience. As for what you suggest "more stringent post-operative control and modification of procedures are necessary in our center", we are open to criticism and suggestions and will pay more attention to post-operative care to such

kind of patients.

At the moment there is no internationally recognized definition and treatment of CRDH. The transplantation procedures and postoperative management strategy of these patients needs more research to be clear in the future. Careful Pre-transplant evaluation and preparation, better transplant techniques and meticulous post-transplant management and treatment are really necessary and we also need to improve these in future work.

Comment3: Unfortunately, there are no clearly and precisely defined such procedures, and at the moment each center modifies them for its own.

Reply3: We very much agree with the reviews. We currently lack a uniform and standard treatment regimen on this issue, and different centers deal with it according to their own experience. Part of the reason may be related to the fact that only a few transplant cases from adult donors to CRDH patients has been reported, which will need to be further gone into. What we can do is to share the experience of our center as much as possible, exchange and discuss more with other centers.

Reviewer B

Comment1: Interesting hypothesis but the number of patients are very less in the study which was mentioned in the limitations of the study. This study may help to replicate same concept at other transplant centers in patients with chronic refractory dialysis hypotension.

Reply1: Just as you say, the case number is really small. There has been only these five patients who developed chronic refractory dialysis hypotension were transplanted from pediatric donor kidney in our kidney disease center so far. And we have fewer opportunities to do such transplants due to adjustments of the allocation system. We think such transplants may give these severe dialysis hypotension patients the potential to improve kidney function and blood pressure, which has certain clinical significance. If possible, we will try to expand sample size and continue to study this issue in the future. Special thanks to you for your good comments.