

#Reviewer 03294293

congratulations. This is a well designed and written case report.

#reviewer 03011757

Review on the manuscript “The first case of cross-auxiliary double domino liver transplantation” The authors of this manuscript describe the successful transplantation of two domino grafts from children into one adult in two stages. They therefore describe a rarely performed procedure, which makes this case interesting for publication. There are some minor points:

- The title states that it is the first case reported, however, the authors cite another published case report in their manuscript (Transplant Proc. 2016 Oct;48(8):2738-2741. doi: 10.1016/j.transproceed.2016.07.031.) Please keep the title more neutral and take out first

Thank you for your careful review of our manuscript. The published report in Transplant Proc. was a communication of operative skills of us. The current report cover the management of the first patient received this technique.

- More information on the surgical part would be interesting – cold ischemia time, time of surgery of the 1st implant and of the 2nd implant.

We have added cold ischemia time and time of surgery to the manuscript.

Please correct:

- Introduction: Line 3: some types, maple syrup urine disease or Methylmalonic academia; Line 5: Domino liver donor graft, last sentence: has been reported
- Case report: Both of them were not optimal domino donors...;
- Clarify that the 2nd liver transplantation was performed one month after the other one
- Discussion: avoiding small for size syndrome; Extending the orifice of the right hepatic vein...; small children;
- Take out that this is the first report in the discussion

Thank you for the details of revision. We have revised the manuscript as your suggestion.

#Reviewer 03261461

1- The FAP patient(recipient) is some times recognized as "host" in the manuscript and in other paragraphs as "recipient" . It will be better to standardize .

Thank you for your advice. We have standardized these expressions as “FAP patient”.

2- The blood group of the recipient and 2 donors as well as the GRWR (graft recipient weight ratio) for each grafts is not mentioned

We have added the data of GRWR to the manuscript.

3- the follow up 258 days includes only the liver profile , copper and ammonia. If the

authors have more data about her follow up cardiac and neurological condition it will be great!

We have added this information to the manuscript.

#Reviewer 02440467

Thank you for inviting me to review this article. The paper is an interesting description of extremely challenging multiple surgical procedures with the aim to perform a cross over domino liver grafts among three patients affected by metabolic liver diseases. The first adult patient was affected by FAB and receive a living donor graft from her mother, the second one was a child affected by Wilson disease, and the third was a child patient affected by OTCD. The Authors' description of the procedures is quite confusing since “graft, host, and recipient” are used in a general term and do not identify exactly which is the patient, which is the graft, which is the host. Graft, host, recipients and different kind of procedures for each single patient are not clearly described. For instance, the AA state: “Donor 1 received the left lateral liver lobe from her mother on September 16, 2013. The domino auxiliary liver transplantation was performed at the same time”; the question is “auxiliary” from which donor, the FAP liver ? The description needs clarification, may also be using a simple numerical identification of 3 patients. Without clear identification of the patient, graft, and techniques, this paper is hardly understandable also for those surgeons with specific experience in domino liver transplantation. The different cross over of the auxiliary grafts should be better clarified, if they come from FAP, from Wilson or OTCD.

We are very sorry not to state the work clearly. We have implanted two graft livers (domino livers) into a FAP patient. One domino graft liver was from a child with Wilson disease and another was from a child with OTCD. We have revised the manuscript as your suggestion.

My question is why the AA didn't split the FAP liver in the same day utilizing the liver machine perfusion in order to have an extra time to proceed to two liver transplantations?

To reduce the operation time of the FAP patient, we need to start the three operations almost at the same time. Machine perfusion would be another choice as you suggested. However it may also increase the work of the surgeons during these operations. Thus a two stage plan seemed more practical on condition of insufficiency of surgeons.

In my opinion, the paper requires a detailed schematic drawing as in Fig 3 for each single patient who should be identified with a detailed description of the procedure performed for each single patient.

That is a good idea to clear all the work. But, in fact, we intended to report the processes of implanting two domino grafts into the FAP patient. Thus Fig 3 was used

to show this work.

More information about early and medium term follow up is necessary above all for vascular and biliary complications of two pediatric patients.

We are very sorry not to state the work clearly. We intended to report the double domino liver transplantation of the FAP patient. No surgical complications were found in the two domino donors. We have added these information to the manuscript.