Answers to Reviewers and Editors

We would like to thank deeply all Reviewers and Editors for analyzing our work and providing comments, which certainly aided us in improving our manuscript.

Reviewer 1

Thank you very much for all your comments and suggestions. A point-by-point response is provided below:

1) ***Why was the TACE protocol applied although tumor diameter and AFP levels were within acceptable limits?***

   Answer: In Brazil, law requires that patients with HCC must be within Milan Criteria in order to be listed for deceased donor liver transplantation. Although tumor diameter and AFP levels were within acceptable limits, the patient was beyond Milan criteria when the HCC diagnosis was confirmed. Therefore, TACE protocol was applied in order to downstage the tumors to within Milan Criteria so that the patient could be listed for deceased donor liver transplantation. After performing TACE, the patient still remained beyond Milan Criteria. His sister then volunteered for liver donation and the patient was selected for living donor transplant. We added this information in the *"Treatment"* item of the *"Case description"* section.

2) ***AFP, dynamic liver CT and MR images are mostly sufficient for the diagnosis of HCC. Why was a diagnostic percutaneous biopsy performed for this patient?***

   Answer: The nodules found in the abdominal CT scan and MR images were considered indeterminate lesions. However, given the growth of the nodules and the rise in alpha-fetoprotein serum levels, there was a high suspicion for HCC. As the CT and MR images could not confirm HCC, percutaneous biopsy was indicated. We would like to apologize as the text addressing this issue was very confusing in the original manuscript. We rewrote the text in the *"Imaging examinations*" item of the *"Case description"* section to make it clearer.

3) ***Why was venovenous bypass performed in a patient with well developed collateral circulation?***

Answer: Our patient presented collateral circulation, however we could observe that it was mainly composed by a massive subcutaneous plexus in the abdominal and thoracic wall. Thus, we decided to use the extracorporeal venovenous bypass before the abdominal skin was incised. We feared that abdominal incision could lead to hemodynamic instability, since it was necessary to ligate the collaterals forming this enormous subcutaneous plexus. Therefore, when we accessed the abdominal cavity and clamped the IVC, the patient was already in venovenous bypass. We added this information in the "*Discussion"* section.

4) ***An important study was published in 2020 on the replacement of the retrohepatic vena cava inferior in LDLT. I suggest that this study be included in Table-1 (Usability of Inferior Vena Cava Interposition Graft During Living Donor Liver Transplantation: Is This Approach Always Necessary? J Gastrointest Surg. 2020;24(7):1540-1551. doi: 10.1007/s11605-019-04342-6)***

Answer: Thank you very much for the suggestion. We included the data from this important study in Table 2 and also throughout the "*Discussion"* section.

5) ***Replacement of retrohepatic vena cava is not always necessary in patients with good collateral circulation. In this regard, I suggest you use the following article (Usability of Inferior Vena Cava Interposition Graft During Living Donor Liver Transplantation: Is This Approach Always Necessary? J Gastrointest Surg. 2020;24(7):1540-1551. doi: 10.1007/s11605-019-04342-6).***

Answer: Thank you again for the suggestion. We added a paragraph addressing this issue in the "*Discussion"* section and cited this reference. In our case, as the collaterals forming the subcutaneous plexus were ligated during the skin incision, the IVC reconstruction was required. In addition, we could observe significant blood flow arising from the infra-hepatic IVC after the native liver was removed, suggesting the necessity of venous continuity restauration with an IVC interposition graft.

6) ***Which vascular graft materials should be use for the retrohepatic vena cava reconstruction ? (Storage of allogeneic vascular grafts: experience from a high-volume liver transplant institute. Int Surg. 2013;98(2):170-4. doi: 10.9738/INTSURG-D-12-00035.1.)***

Answer: In our opinion, autologous or allogeneic grafts are the best option for retrohepatic vena cava reconstruction, as they present less thrombosis and infection risk. There is no consensus in literature regarding this topic, though. We added a paragraph addressing this issue in the "*Discussion"* section. We thank you again for the reference suggestion, which was cited in this new paragraph.

Reviewer 2

We would like to thank you for your comments and analysis.

1) ***In laboratory examination, readers may not be accustomed to the normal values of the each laboratory data. It would be better to add the normal reference data.***

   Answer: Thank you for the suggestion. To ease the reading, we provided a new table with the laboratory data and with the normal range of each test (Table 1)

2) ***In discussion, VCI --> IVC***

   Answer: Thank you for pointing out this mistake. We corrected it in the discussion.

Science editor

Thank you very much for analyzing our manuscript and for your comments.

1) ***In laboratory examination, readers may not be accustomed to the normal values of the each laboratory data. It would be better to add the normal reference data.***

   Answer: Thank you for the suggestion. We provided a new table with the laboratory data and with the normal range of each test (Table 1)

2) ***The authors need to provide the signed Conflict-of-Interest Disclosure Form and Copyright License Agreement.***

   Answer: We deeply apologize for not sending the required forms. We have sent them together with this revision.

3) ***Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor.***

   Answer: We apologize for not sending the figures and tables in the appropriate format. We have sent the required files together with this revision.

4) ***The author should number the references in Arabic numerals according to the citation order in the text. The reference numbers will be superscripted in square brackets at the end of the sentence with the citation content or after the cited author's name, with no spaces.***

   Answer: We apologize for not inserting the references in the appropriate format. We have corrected this issue in the revised manuscript, adhering to the Format for References Guidelines.