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Title: Is Right Lobe Liver Graft with Rudimentary or absence of Right Hepatic Vein suitable for Living Donor Liver Transplantation?

Reviewer's Comments (03479126)

This paper provided two interesting cases related with LDLT. Considering that LDLT is a main surgical procedure in liver transplantation, which is a important supplementary to DCD. However, the safety of the donors and a adequate functional liver volume for recipitent are major concerns. To provide functional liver volume, the venous outflow construction is critical to reduce the post-operative liver failure, to our knowledge, RL-LDLT mostly performed with a donor right graft wiith right hepatic vein. However, the authors reported two marginal donors absence with RHV, and the surgical outcomes are receptible. We recommed the authors providing more fundemental information about the two procedures, for example, the CT-scan of the donors, and the detail measurement of the reconstructed IRHV.

Response to the Reviewer (03479126)

Thank you for your review and positive critisms about our report. You have summarized the importance of both live donor liver transplantation and venous drainage. So thank you very much. According to your important suggestions, we have added the preoperative CT image of the donor. Venous reconstruction technique presented in both case presentation section.

Reviewer's Comments (03021264)

This paper introduced a rare reconstruction method of hepatic vein with right lobe liver graft, which is helpful for clinical work. The author had reported one case in the past, this time increase to two cases with the same technical method. The descriptions of the two cases in this paper were duplicated and should be simplified. There were a few spelling mistakes in the article, please correct them.

Response to the Reviewer (03021264)

Thank you for your review and positive critisms about our report. We have reported a similar case in the past with absent RHV. In this paper we report two new cases which are not related to the case reported previously. We aim in this report to further illestrate the safety and consistancy of successful outcome in this unusal type of cases which used to be denied for liver transplantation. Venous reconstruction techniques of back-table stage was written under a separate subtitle. English language was also revised.

Reviewer's code: 03537672

Summary of the article This article is the report of two cases of living donor liver transplantation using right liver graft with rudimentary or congenitally absence of right hepatic vein. And thei conclusion is that these congenital variations of the hepatic venous structure are not contraindication for living donor liver transplantation. Comments to the authors The anatomical aspects of these two cases are actually interesting, however, it might not be clinically disadvantage to the extent that suficient venous drainage area is secured. And it would not critical to the drainage efficacy the position of the main hepatic venous oricife as long as adequate anostomosis to the inferior vena cava is established. The authors should explain the importance of the right hepatic vein itself even though if thick inferior right hepatic vein present. Major concerns 1. The authors discribed total liver volume and preoperative expected graft volume in both cases. It would be better for the authors to measure the volume of each drainage area of rudimentary right hepatic vein and compensatory inferior right hepatic veins as long as the volumetric analysis software is available in their institute. 2. It is better to depict three-dementional reconstructed image to show the relationships between portal tributaries and hepatic venous tributaries, or at least, actual CT images that exhibit the rudimentary right hepatic vein. 3. The authors should discribe the way of venous reconstruction in their institute, for normal right hepatic vein cases, then discuss the difference between normal cases and these two cases. Minor problems 1. In discussion, the discription of the way, the remnant liver volume is > 30% or not, to make a dicision whether the middle hepatic vein is included to the graft or

not is off topic matter. 2. The authors had better to mention the lower limit of the remmnant liver volume for donor safety in right liver graft procurement in their institute.

Response to the Reviewer (03537672)

I think the reviewer is someone who is closely involved with transplantation. Their comments are very nice and informative. Lowest limit for GRWR in our clinic is around 0.75, except in unexpected situations (0.7-0.75). If the graft parenchymal quality is good, the donor is young age and the donor's BMI is within normal limits, we accept the GRWR value up to 0.75.

Remnant liver volume in libving liver donors is directly related to the donors' age, whether MHV will be harvested with graft, and histpathological proven parenchymal quality. We generally want the remnant liver volume to remain >30%. In rare cases, there are a few cases that we have reduced to 28%, which are very young and parenchyma quality is quite good. Also, MHV must be preserved in donors with remnant volume <30%.

With Best Wishes

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