Peer Review File

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Reviewer A

Although the subject is enticing, I fear that the data presented do not justify the conclusions of this manuscript as they are rather preliminary and represent a very small group of just 14 patients. I think, in fact, that to draw any such conclusions a substantially larger patient group would be needed, preferably multi-center, that also describes the setup of the program (including a proctoring program, gradual build up of cases etc).

Reply1: Thank you for your very important comments. As you commented, this study has a small sample size and the findings of this study might be difficult universally applicable. Thus, we revised our conclusion according to the limitation of this study. We are going to make a evidence through the well-designed multi-centre study and introduce the system of education and monitoring of robot hepatectomy for the patients' safety under the multi-disciplinary approach.

Changes in the text1: (Page: Abstract 4**, Line Number:**74-77**),(Page:** Discussion 14**, Line Number:** 318-321**)**

- ➢ Before revision: Despite its limitations, our results suggest that liver surgeons with laparoscopic experience can easily and rapidly adapt to new RH technology.
- ➢ After revision: From our initial experience, RH might be considered as a feasible procedure in the liver resection, even in major hepatectomy. In addition, surgeons with sufficient experience in LH could rapidly adapt for RH. However, we have to make a system for education and monitoring of this innovative surgery for the patients' safety.

Reviewer B

As a HPB and robotic surgeon, it was a pleasure to read from you beginning your robotic hepatectomy program. I am sure that this will soon be a routine for you and I encourage you to move foward. I have a few suggestions (in fact, small details), that I hope can improve justa a little bit your paper.

Congratulations,

Reply: Thank you for your careful review. We appreciate the time and efforts that you have dedicated to provide insightful feedback to improve this manuscript.

1. Please do review the references style. There are a few inconsistencies, specially on the initial references.

Reply1: Thank you for your careful review. As suggested, the reference style was revised by guidelines.

Changes in the text1: Reference (2)

2. I think Figure 2 must undergo some editing in pictures displacement.

Reply2: Thank you for your important comments. To improve the quality of figure 2, we revised the alignment.

Changes in the text2: Figure (2)

3. Line 155: the right hepatic artery and right portal vein were dissected and TRANSECTED.

Reply3: Thank you for your comments. That sentence was revised as your comments.

Changes in the text3: (Page: method 8**, Line Number:** 180-181**)**

- ➢ Before revision: The right hepatic artery and right portal vein were then isolated and resected.
- ➢ After revision: The right hepatic artery and right portal vein were dissected and transected.

4. The Figure 2e image is amazing, showing the transection line between the right and left liver after transection of the right artery and portal vein. Nevertheless, we can see the right posterior sector clearly enhanced by fluorescence. Please comment.

Reply4: Thank you for your important comments. As you mentioned, it is not common for ICG uptake in the right posterior section, even after we divided the right hepatic artery and portal. There are two possible explanations for this case. First, it would have shown because of the intrahepatic vascular shunt. Second, ICG might be uptake through the right inferior hepatic vein (RIHV) (about 12mm).

Changes in the text4: (Page: method 9**, Line Number:** 187-190**)**

- ➢ After revision: #Tip: It is not common for ICG uptake in the right posterior section, even after we divided the right hepatic artery and right portal vein. There are two possible explanations for this case. First, it would have shown because of the intrahepatic vascular shunt. Second, ICG might be uptake through the right inferior hepatic vein (RIHV) (about 12mm).

5. I really enjoyed the tips you provided. Excellent. Have you ever hear about selective hepatic artery clamping during minimally invasive hepatectomies in order to avoid Pringle maneuver?

Reply5: Thank you for your comments. As you commented, selective hepatic artery clamp is better for the limited resection or it is also helpful to reduce the intraoperative bleeding to make an enough surgical margin even in the anatomical liver resection. In this case, we divided the hepatic artery and portal vein before parenchymal dissection and we did not apply further selective left hepatic artery clamp or pringle maneuver. However, in case of patients with cirrhosis, selective inflow control could apply.

Changes in the text5: (Page: method 9**, Line Number:** 205-206**)**

- ➢ Before revision: Pringle's manuever can be performed using nylon tape and a long tube when immediate reduction of inflow is necessary.
- ➢ After revision: Pringle's manuever can be performed using nylon tape and a long tube when immediate reduction of inflow is necessary. In patients with cirrhosis, selective inflow occlusion techniques could apply to reduce blood loss and injury to the liver function.

6. I would advice to change the abbreviation of robotic right hemihepatectomy to RRH.

Reply6: Thank you for your helpful comments. To clarify the meaning, we revised the abbreviation from robotic right hemihepatectomy to RRH.

Changes in the text6:

- ➢ Before revision: robotic right hemihepatectomy (robotic RHH)
- ➢ After revision: robotic right hemihepectomy (RHH)

Reviewer C

Thank you for the opportunity to review this interesting manuscript by Boram Lee et al. on

"Initial Experience with a Robotic Hepatectomy Program at a High-Volume Laparoscopic Center: Single-Center Experience and Surgical Tips"

The authors describe their initial experience and learning curve with robotic liver resection in 15 cases. On contrast, the authors have hugh experience with more than 1000 laparoscopic liver resections.

Admittedly, the number of robotic liver resections is rather small, but that´s not a

criterion for exclusion. On contrast, the paper is nicely written and easy to understand. It is more or less a “tips and tricks” paper or “how I do it” than a true scientific report. This is not negative, not at all, as the paper gives valuable advices how to start a program and where problems may be expected, in particular, if the new program may not be based on hugh laparoscopic experience.

As such, the paper is very interesting, and there is not much to be criticized.

However, the list of references should be revised. There are many papers from the beginning of laparoscopic liver surgery but only few new papers. Certainly, when describing the beginnings of a robotic program and comparing it to laparoscopic liver surgery then also papers from the beginning of laparoscopic liver surgery need to be cited but on the other hand, the new technique has to be compared to the mainstay of laparoscopic liver surgery, thus requiring references mirroring the status quo.

Reply1: Thank you for your careful review. We appreciate the time and efforts that you have dedicated to provide insightful feedback to improve this manuscript. As you commented, we revised the reference

Changes in the text1: Reference (28,29,30,42)