

## **Robot-assisted radical cholecystectomy for gallbladder cancer**

### **– A review**

Weng Jiayi, Vishal G. Shelat

Corresponding author

Weng Jiayi

*Yong Loo Lin School of Medicine, National University of Singapore , 10 Medical Dr,  
Singapore 117597*

---

Handling editor:

Michal Heger

Department of Pharmaceutics, Utrecht University, the Netherlands

Department of Pharmaceutics, Jiaxing University Medical College, Zhejiang, China

Review timeline:

Received: October 08, 2021

Editorial decision: December 12, 2021

Revision received: December 15, 2021

Editorial decision: January 8, 2022

Published online: February 2, 2022

---

1<sup>st</sup> Editorial decision

12-Dec-2021

Ref.: Ms. No. JCTRes-D-21-00171

Robot-assisted Radical Cholecystectomy for Gallbladder Cancer – A review

Journal of Clinical and Translational Research

Dear Ms Weng,

Reviewers have now commented on your paper. You will see that they are advising that you revise your manuscript. If you are prepared to undertake the work required, I would be pleased to reconsider my decision.

For your guidance, reviewers' comments are appended below.

If you decide to revise the work, please submit a list of changes or a rebuttal against each point which is being raised when you submit the revised manuscript. Also, please ensure that the track changes function is switched on when implementing the revisions. This enables the reviewers to rapidly verify all changes made.

Your revision is due by Jan 11, 2022.

To submit a revision, go to <https://www.editorialmanager.com/jctres/> and log in as an Author. You will see a menu item call Submission Needing Revision. You will find your submission record there.

Yours sincerely

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Reviewers' comments:

Reviewer #1: I read with interest the paper on robotoc radical cholecystec. I commend authors for conducting such a study as it is indeed difficult to pool and analyse such heterogenous data. I agree with authors on lack of data and i feel partly as gallbladder cancer happens in countries where robotic surgery is slow to adapt due to cost. I suggest authors consider this in discussion. In addition i have come commets.

1. 4 patients had open conversion. Two pts open conversion was done for biliary recon. I would argue that it is easier to recon by robotic rather than laparoscopy. Pls comment on this.
  2. Authors must include short dollowup duration of 12 months as a limitation as we cant derivate oncological conclusions based on this report.
  3. Do authors do robotic surgery and radical chole? Pls enhance discussion with personal experience.
  4. What is ur view on port site metastases and recurrence?
  5. Please mention about any chemo or immunotherapy in robotic cases and any role
- Thanks

Reviewer #2: Authors condcuted systemic review of the robotic radical surgery for galbladder cancer. The study was very carefully designed and the paper is quite clear.  
I have a only few comment about minor without any major concern.

Minor. I reccomend to put the country of study in the table.

Wxcellent and important study which i enjoyed to read.

---

Authors' response

Date 15th Dec 2021

Re: Ref.: Ms. No. JCTRes-D-21-00171  
Robot-assisted Radical Cholecystectomy for Gallbladder Cancer – A review

Dear Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Many thanks for your kind assistance to seek peer review for our manuscript that focusses on utility of robotic surgery for gallbladder cancer. We find the peer reviewer comments useful and hopefully we have addressed to their satisfaction. Please find point by point response with edits made within the manuscript, marked with “underlines”.

Reviewer #1: I read with interest the paper on robotic radical cholecystec. I commend authors for conducting such a study as it is indeed difficult to pool and analyse such heterogenous data.

Comment 1: I agree with authors on lack of data and i feel partly as gallbladder cancer happens in countries where robotic surgery is slow to adapt due to cost. I suggest authors consider this in discussion.

Response 1: Many thanks for detailed review and insightful comments. We appreciate the deep interest in our manuscript and agree that this logic is entirely reasonable and valid. Gallbladder cancer is more common in Bolivia, Chile, India, Thailand etc. countries. All except Chile are widely acknowledged as developing economies with health access and affordability disparities than remains bridging. In our opinion, in addition to cost factor; intrinsic motivation of surgical teams in reporting the experience is also important factor in lack of adoption or paucity of reporting. We have included in discussion – “Due to paucity of GbC in western world, lack of screening programs for early diagnosis of GbC, and relatively slow adoption of minimal access surgery for complex biliary procedures, there is lack of evidence supporting safety and feasibility of minimal access radical cholecystectomy.” We have added the following – “Increased prevalence of GbC in developing economies like Bolivia, Chile, India, and Thailand where accessibility and affordability of robotic surgery is limited is contributory to paucity of high-quality clinical data showing benefits of RRC”

Comment 2. 4 patients had open conversion. Two pts open conversion was done for biliary recon. I would argue that it is easier to recon by robotic rather than laparoscopy. Pls comment on this.

Response 2. Many thanks for this important and essential comment. As you rightly pointed out, the extra robotic angulation and rotational movement provides a great platform to perform intracorporal anastomosis and suturing. In fact robotic platform makes the surgery easier. Thus, we feel probably the two conversions for HJ might have been due to other competing reasons or early in the learning curve of the surgeons. We have added the following in discussion – “In addition, our review reports two open conversions for hepaticojejunostomy reconstruction. It is not entirely clear if there were competing reasons for open conversion, as we would assume that robotic platform facilitates bilio-enteric reconstruction. In our opinion learning curve and considerations of patient safety probably contributed to open conversions.”

Comment 3. Authors must include short follow up duration of 12 months as a limitation as we can't derive oncological conclusions based on this report.

Response 3. Many thanks for the important issue. Survival outcomes are equally important to short term safety and feasibility of robotic surgery. We have added in the concluding paragraph – “Majority of studies did not report long-term oncologic outcomes, and thus benefits of robotic platform to enhance survival outcomes remains to be shown.”

Comment 4. Do authors do robotic surgery and radical chole? Pls enhance discussion with personal experience.

Response 4. The senior author is credentialed to perform robotic procedures. But due to paucity of gallbladder cancer in Singapore, as well as due to financial burden, he has not performed robotic radical cholecystectomy. We have added the following the discussion – “At the present time, affordability remains the main challenge for many surgical units to embrace robotic surgery. Healthcare systems largely follow utilitarian ethics, and thus without strong evidence of benefit, it is not rational to justify the extra cost incurred for using robotic platform for the procedures that can be performed by laparoscopic techniques. As for example in Singapore, an estimated additional cost of SGD 5000 is billed to patient for using robotic platform.”

Comment 5. What is ur view on port site metastases and recurrence?

Response 5 Thanks for this comment. We have added in the last section of discussion – “In addition, port site metastases are an important complication of GbC surgery. There is insufficient data if RRC has equal or reduced risk of port site metastases.”

Comment 6. Please mention about any chemo or immunotherapy in robotic cases and any role  
Response 6. Many thanks for this comment. At the present, role of immunotherapy is limited.

Thus, we discuss the role of adjuvant chemotherapy. We have added the following –  
“Intuitively it is possible that RRC benefits patients from reduced pleuropulmonary and wound morbidity; and thus, adjuvant chemotherapy can be started early, with potential oncologic benefits.”

Reviewer #2: Authors conducted systemic review of the robotic radical surgery for gallbladder cancer. The study was very carefully designed, and the paper is quite clear. Excellent and important study which i enjoyed reading.

Comment 1: I have a only few comment about minor without any major concern. I recommend putting the country of study in the table.

Response 1: We are humbled with encouraging remarks for our efforts to compile this manuscript. We have added the country names in Table 1.

Please do not hesitate to contact us if any further clarification is needed.

Thanking you

Sincerely

Vishal G Shelat

---

2<sup>nd</sup> Editorial decision  
08-Jan-2022

Ref.: Ms. No. JCTRes-D-21-00171R1  
Robot-assisted Radical Cholecystectomy for Gallbladder Cancer – A review  
Journal of Clinical and Translational Research

Dear authors,

I am pleased to inform you that your manuscript has been accepted for publication in the Journal of Clinical and Translational Research.

You will receive the proofs of your article shortly, which we kindly ask you to thoroughly review for any errors.

Thank you for submitting your work to JCTR.

Kindest regards,

Michal Heger  
Editor-in-Chief  
Journal of Clinical and Translational Research

Comments from the editors and reviewers: