Response to reviewers' comments

Reviewer(s)' Comments to Author:

Reviewer #1:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Minor revision

Specific Comments to Authors: Dear author, thanks for your paper. Ita has been an interesting scientific article to read. The paper per se is well written and has a good scientific quality. I would suggest to accept the paper. However, I think that this procedure has many more risk respect to other less invasive gallbladder sparing procedures like CT or eco-guided cholecystostomy (the skin cut is very small, 1cm perhaps). I think that this should be discussed.

Response:

1.Thank you very much for your comment. I would like to answer this question as follows:

First, with regard to the safety of NOTES gallbladder-preserving surgery, studies have shown that performing minimally invasive operations, such as endoscopic trans-gastric appendectomy **(PMID:27058950)**, endoscopic trans-gastric abdominal exploration and biopsy **(PMID:24818547)**, and endoscopic trans-gastric cholecystectomy **(PMID: 32503072)**, using a flexible trans-gastric endoscope in the abdomen is safe and feasible, without serious adverse events **(PMID:34091533)**. At present, our team has completed endoscopic trans-gastric gallbladder-preserving cholecystolithotomy in four cases and endoscopic trans-gastric gallbladder-preserving polypectomy in three cases, without evident postoperative complications.

Next, with regard to the scope of operation, endoscopic trans-gastric

gallbladder-preserving surgery is suitable for removing gallstones, gallbladder polyps, and other primary gallbladder diseases, which can simultaneously eliminate the causes of gallbladder disease. However, CT/eco-guided cholecystostomy is a percutaneous drainage for controlling acute inflammation, and most patients who have undergone such operation must have a second operation to remove the gallbladder **(PMID: 34021480；PMID: 34909596)**.

Finally, endoscopic trans-gastric gallbladder-preserving surgery have the following advantages: (1) The flexible endoscope allows magnification at 100× plus at most. During the procedure, it is free to bend and spin, and it is suitable for observing the gallbladder without blind spots, detecting micro-gallstones and small polyps directly under endoscopy, and effectively reducing the chance of relapse of gallbladder disorders. (2) The flexible endoscope, which has high-pressure water pumping–suction functions, can flush or cleanse the gallbladder and reduce the chance of relapse of gallbladder disorders. (3) The endoscopic trans-gastric gallbladder-preserving surgery can not only avoid wounds and scars in the abdomen but also reduce the effect on hemodynamics and abdominal viscus **(PMID: 26272856)**, which can eliminate the physical and emotional distress of patients. Particularly those who want their abdominal walls to be free of scars. Please read the following articles **(PMID:34091533)**.

2. The whole manuscript have been carefully revised in order to avoid any grammar error. If you think additional editing needs to be done, please feel free to contact us.

Reviewer #2:

Scientific Quality: Grade B (Very good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: In this article a new method for pure NOTES gallbladder preservation surgery was provided.This research preliminarily confirmed its safety and feasibility. It has good innovation and certain clinical prospects and application value.Support the journal to publish the manuscript.But,it is recommended that the manuscript use the operation video of snare assisted group(SA).

Response:

1.Thank you so much for this important comment. The revised manuscript has adopted the operation video of snare assisted group(SA).

2. The whole manuscript have been carefully revised in order to avoid any grammar error. If you think additional editing needs to be done, please feel free to contact us.

Response to editorial office's comments

(1) Science editor:

The manuscript provides a new method for simple gallbladder preservation surgery. The use of standard endoscopic instruments for SNARE assisted pure notes gallbladder preservation surgery on pigs reduces the difficulty of the operation, shortens the operation time, and does not increase complications. The manuscript is well written and can be helpful for the readers to ameliorate the therapeutic approach for this scenario. Nevertheless, there are a number points that may deserve some revisions.1. The limitations of this article should be added to the discussion. 2. Can the 28 day blood indexes be displayed?

Language Quality: Grade B (Minor language polishing)

Scientific Quality: Grade B (Very good)

Response:

1. The limitations of this manuscript were added in red text to the last paragraph of the "Discussion" section.

2. On the 28th day after surgery, blood indices were added to the revised manuscript, as labeled in red in the "Operation Safety" of the "Results" section and Table 2.

3. The whole manuscript have been carefully revised in order to avoid any grammar error. If you think additional editing needs to be done, please feel free to contact us.

(2) Company editor-in-chief:

I have reviewed the Peer-Review Report, the full text of the manuscript, and the relevant ethics documents, all of which have met the basic publishing requirements of the World Journal of Gastroenterology, and the manuscript is conditionally accepted. I have sent the manuscript to the author(s) for its revision according to the Peer-Review Report, Editorial Office's comments and the Criteria for Manuscript Revision by Authors. Before final acceptance, uniform presentation should be used for figures showing the same or similar contents; for example, "Figure 1Pathological changes of atrophic gastritis after treatment. A: ...; B: ...; C: ...; D: ...; E: ...; F: ...; G: ...". Please provide decomposable Figures (in which all components are movable and editable), organize them into a single PowerPoint file. Please authors are required to provide standard three-line tables, that is, only the top line, bottom line, and column line are displayed, while other table lines are hidden. The contents of each cell in the table should conform to the editing specifications, and the

lines of each row or column of the table should be aligned. Do not use carriage returns or spaces to replace lines or vertical lines and do not segment cell content. In order to respect and protect the author's intellectual property rights and prevent others from misappropriating figures without the author's authorization or abusing figures without indicating the source, we will indicate the author's copyright for figures originally generated by the author, and if the author has used a figure published elsewhere or that is copyrighted, the author needs to be authorized by the previous publisher or the copyright holder and/or indicate the reference source and copyrights. Please check and confirm whether the figures are original (i.e. generated de novo by the author(s) for this paper). If the picture is 'original', the author needs to add the following copyright information to the bottom right-hand side of the picture in PowerPoint (PPT): Copyright ©The Author(s) 2022.

Response:

Thank you for your helpful comments. The manuscript has been revised, which is shown in red text. In addition, new attachments, "Image File," and "Table File" have been uploaded.