

## Peer Review File

Article information: <http://dx.doi.org/10.21037/gc-20-576>.

### **Reviewer A**

Comment 1. IRB approval should be confirmed in material and methods session.

Reply 1: Thanks to your suggestive comments. The study protocol was reviewed and approved by the ethics committee of Fujian Medical University Union Hospital (2020KY0107). We have also uploaded the IRB approval.

Changes in the text:

The study protocol was approved by the ethics committee of Fujian Medical University Union Hospital (2020KY0107). Written informed consent was obtained from the patients for publication of this manuscript and any accompanying images. (Methods, Paragraph 1, Line 103-107, Page 6-7; Ethical Statement, Line 363-365, Page 18).

Comment 2. The "surgical technique" session seems to be very boring. It can be omitted or simplified.

Reply 2: Thanks to your constructive comments. The surgical technique section is very important to illustrate the "Kimura-first" three-step strategy. Therefore, we simplify the section of the surgical technique.

Changes in the text:

As indicated in the Methods section, Paragraph 4-7, Line 125-160, Page 8-9.

Comment 3. Results should be rearranged under the subtitles so that potential readers could more easily follow.

Reply 3: Thanks to your suggestive comments. The results have been rearranged under the subtitles. We also revised the subtitles of the tables related with the corresponding results, which makes it easier for the readers to understand. Thanks again for the suggestions.

Changes in the text:

As indicated in the Results section, Paragraph 2-7, Line 182-247, Page 10-13.

Comment 4. From the viewpoint of intension-to-preserve the spleen, data of initial planned distal pancreatectomy (DPS) will tell a totally different story when comparing with SpDP. This should be commented in discussion section.

Reply 4: Thanks to your helpful comments. Initially planned distal pancreatectomy definitely has shorter operative time than spleen-preserving distal pancreatectomy. We have commented this in the Discussion section.

Changes in the text:

Choi et al. reported that initially planned laparoscopic distal pancreatectomy had a shorter operative time than laparoscopic spleen-preserving distal pancreatectomy(18). However, no significant differences in the operative time between these three procedures were noted in our study, which might be attributed to the step-by-step strategy. (Discussion, Paragraph 2, Line 281-286, Page 15)

Comment 5. These following recent important articles should be cited in the introduction or discussion session.

Ann Transl Med. 2020 Mar;8(5):188

Surg Endosc. 2011 Jun;25(6):2004-9.

Reply 5: Thank you for your kind suggestions. We have cited the two articles in the introduction session.

Changes in the text:

Currently, spleen-preserving procedures are advocated for benign and low-grade malignant pancreatic tumors to avoid sacrificing the spleen in DP (5-7). (Introduction, paragraph 2, Line 73-75, Page 5)

Several studies have reported the superiority of the robotic system compared to laparoscopic procedures for splenic preservation in DP (11-13). (Introduction, paragraph 3, Line 82-83, Page 5-6)

Comment 6. Table 2, and 3, number of the patients is not matched. 40 vs 11 or 40 vs 20?

Reply 6: Thank you for your kind suggestions. We'd like to apologize for the imprecisely description. Whereas, the numbers were correct.

Table 2 describes the clinicopathologic characteristics and perioperative and postoperative factors of the 52 patients who underwent RSPDP (the Kimura technique, 41 patients vs. the Warshaw technique, 11 patients). To evaluate the efficacy of the robotic system for splenic vessel preservation during RDP, Table 3 analyzes the clinicopathologic characteristics and perioperative and postoperative factors of the patients who underwent RDP with or without splenic vessel preservation (the Kimura procedure, 41 patients vs. the Warshaw procedure and RDPS, 20 patients). Therefore, the numbers were correct.

Changes in the text:

No changes.

Comment 7. In era of far advanced laparoscopic era, comments on benefit of robot should be well balanced with the current high level of laparoscopic technique. No clear evidence to support only robotic system in performing pancreatectomy. These concepts should be emerged in discussion session in order for potential readers not to have a bias regarding robotic surgery.

Reply 7: Thank you for your constructive suggestions. We have commented these concepts in the Discussion section.

Changes in the text:

In the era of advanced minimally invasive pancreatic surgery, some existing studies have shown equivalent outcomes of laparoscopic and robotic surgeries. (Discussion, Paragraph 2, Line 263-265, Page 14)

## **Reviewer B**

I read with great interest the manuscript by Lin et al entitled " "Kimura-first" strategy for robotic spleen preserving distal pancreatectomy: experience of 61 consecutive cases in a single institution"

Despite the great interest of this topic, multiple concerns are present:

### Abstract

Comment 1. Pag. 3 line 44: please specify what RDPS means

Reply 1: Thanks to your kind suggestions. We have supplemented the meaning of RDPS: robotic distal pancreatectomy with splenectomy.

Changes in the text:

Sixty-one patients scheduled for RSPDP who received RDP were included in this study (Kimura technique, 41 patients; Warshaw technique, 11 patients; and robotic distal pancreatectomy with splenectomy (RDPS), 9 patients). (Abstract, Line 43-45, Page 3)

Comment 2. Results in the abstract should be better reported.

Pag. 3 Line 78-46: percentage of 85.2% and is referred to the combined population of Kimura and Warshaw procedures? Similarly, to which group is referred the 82.4% of splenic vessel preservation?

Reply 2: Thanks to your helpful comments. We have rewritten the sentence for a clearer meaning. The overall splenic preservation rate in RDP was 85.2% (52/61). The preservation rate of splenic vessels with the Kimura technique in RSPDP was 78.8% (41/52). Sorry for the mistake of the proportion with splenic vessel preservation.

Changes in the text:

The overall splenic preservation rate in RDP was 85.2% (52/61). The preservation rate of splenic vessels with the Kimura technique in RSPDP was 78.8% (41/52). (Abstract, Line 45-47, Page 3)

Comment 3. Pag. 3-4 lines 48-50: please clarify in a better English the sentence: it

should be a crucial point of the manuscript (please report some statistics in this regard)

Reply 3: Thanks to your suggestive comments. We have rewritten this sentence with some statistic results.

Changes in the text:

The logistic regression models showed that obvious splenic vessel compression by the tumor was an independent risk factor for splenic vessel preservation with RSPDP (OR 0.021, 95% CI 0.002-0.271, p=0.003) and RDP (OR 0.019, 95% CI 0.002-0.176, p=0.000). (Abstract, Line 50-53, Page 4)

Introduction

Comment 4. Pag 6 line 61: please substitute “in the pancreatic body...” with “of the pancreatic body...”

Reply 4: Thank you for your kind suggestion. We have substituted the word.

Changes in the text:

Minimally invasive distal pancreatectomy (MIDP) has been widely accepted as a routine procedure for benign and malignant tumors of the pancreatic body and tail. (Introduction, paragraph 1, Line 63, Page 5)

Comment 5. Pag 6 line 81: please add the following reference: PMID: 31394981; DOI: 10.1177/1553350619868112

Reply 5: Thanks to your helpful comments. We have added the references in the sentence.

Changes in the text:

Several studies have reported the superiority of the robotic system compared to laparoscopic procedures for splenic preservation in DP (11-13). (Introduction, paragraph 3, Line 82-83, Page 5-6)

Comment 6. Pag 6 lines 95-96: “We present ... checklist” should be moved to the Methods section

Reply 6: Thanks to your kind suggestions. “We present ... checklist” has been moved

to the Methods section.

Changes in the text:

We present the following article in accordance with the STROBE guideline checklist.  
(Methods, Paragraph 1, Line 106-107, Page7)

## Results

Comment 7. Results are very difficult to read and not really well exposed. Logistic regression models should represent the central node of the results. However, the three analyses performed are quite misleading. More specifically, authors should clarify the patients (number and procedures) included in the three models (RDP with splenic preservation, RSPDP with splenic vessel preservation and RDP with splenic vessel preservation). Understanding of the three analyses of the text is only possible with a contemporary analysis of the Tables. I do really suggest to appropriately re-write all the section from line 229 to line 252.

Reply 7: Thanks for your constructive comments. We have clarified the patients (number and procedures) included in the three logistic models. Subtitles were added in each paragraph of the Results section for a better clarification. We have also revised the subtitles of the tables related with the corresponding results, which makes it easier for the readers to understand. Thanks again for the suggestions.

Changes in the text:

As indicated in the Results section, Paragraph 2-7, Line 182-247, Page 10-13.

## Discussion

Comment 8. Pag 16 lines 311-313: please set a hypothesis of the cut off value of 50 years as independent risk factor for identifying splenic vessels preservation

Reply 8: Thanks for your suggestive comments. The mean age of all patients was  $45.8 \pm 14.9$  years. Therefore, all patients were divided into two subgroups according to age:  $< 50$  and  $\geq 50$  years. Interestingly, the logistic regression models showed that age  $\geq 50$  years was also an independent risk factor for splenic vessel preservation with RSPDP (OR 0.078, 95% CI 0.007-0.888,  $p=0.040$ ) and RDP (OR 0.136, 95% CI

0.021-0.883,  $p=0.037$ ).

Changes in the text:

(Discussion, Paragraph 3, Line 310-315, Page 16)