

## Peer Review File

Article information: <https://dx.doi.org/10.21037/jovs-23-22>

### Reviewer comments

I want to congratulate the authors for their great multimedia work.

I have a few comments on this article.

Comment 1: Their trans mesenteric approach was described and published in the past  
2023 Surgical Endoscopy

robotic distal pancreas-sparing duodenectomy with trans mesenteric approach

Reply 1: Yes, you are correct that our institution has published a small case series on this approach recently. The focus of that case series was to report outcomes to prove this approach as safe and effective. This current video and manuscript submitted to JOVS is to teach said approach so surgeons everywhere can learn how to incorporate this safe and effective operation into their own practice.

Comment 2: The location of the lesion needs to be described more precisely otherwise, some might argue why you resected the duodenum. The video has shown that the location is almost posterior to PV-SMV complex in the uncinate process? Please clarify it.

Reply 2: Thank you for allowing us the opportunity to be more precise. For any lesions of the uncinate process, the third and fourth portions of the duodenum must be mobilized in order to access the uncinate process and lesion. This leaves these portions of the duodenum devascularized, which must ultimately then be resected.

Changes in the text: To fully access the uncinate process in which the lesion is situated, the third and fourth portions of the duodenum and proximal jejunum require further mobilization, which ultimately leaves these portions of the duodenum devascularized. (Page 4, second paragraph)

Comment 3: The video required

- a. how they identify the ampulla
- b. how to avoid injury to the ampulla and bile duct

Reply 3: There are multiple different ways to identify the ampulla, which include intraoperative ultrasound, direct visualization, or cannulation of the common bile duct with a catheter. I have added those maneuvers to the text. In our video, we use intraoperative ultrasound and direct visualization to identify the ampulla. Injury can be avoided with identification prior to anastomosis.

Changes in the text: Prior to creating an anastomosis, the Ampulla of Vater should be identified with either intraoperative ultrasound, direct visualization, or cannulation of the common bile duct with a catheter. (Page 4, last paragraph)

Comment 4: Please take out zoom-in effect in the media

Reply 4: Thank you for this suggestion. The first two slides are not intended to be used along with the video instructions on how to perform the operation.

Comment 5: The round ligament flap- not described in the video.

Reply 5: You are correct. The round ligament maneuver under “tips and tricks” is a consideration we suggest any time an upper gastrointestinal anastomosis is created. It can serve much like a Graham patch or an added protective layer. However, in this case, we did not perform one. We simply wanted to add it in tips and tricks since this is a common practice at our institution that can be considered if a surgeon were to have concern about the viability of his or her anastomosis.

Comment 6: I would emphasize more why the robotic trans mesenteric approach was useful in this particular occasion.

Reply 6: Thank you for allowing us to emphasize why this approach is useful for this particular tumor and its location. I have added emphasis in the introduction as to why this technique of works specifically for lesions located in the uncinate process given their difficult location.

Changes to the text: This technique, however, becomes much more difficult when the lesion is located in the uncinate process where the duodenum and mesenteric vasculature restrict access to this portion of the pancreas. Herein, we describe a novel approach to robotic pancreatic enucleation of the uncinate using a transmesenteric technique and sleeve duodenectomy. (page 3, introduction)

### **Editorial Comments**

Comment 7: We kindly request that you revise your manuscript according to the SUPER (Surgical technique Reporting Checklist and standards) guideline and please include the completed checklist (the reformatted SUPER checklist for the journal is attached) as a supplementary material when submitting your revised manuscript. For each item on the checklist, specify the corresponding page/line and section/paragraph number in the manuscript. For items on the list that are not relevant to your case, kindly indicate “N/A”.

Reply 7: It is complete and now attached as a supplementary material.

Comment 8: A statement like “We present this article in accordance with the SUPER reporting checklist” should be included at the end of the “Introduction”. The manuscript should also include a Reporting Checklist statement in the footnote. (<https://jovs.amegroups.org/pages/view/guidelines-for-authors#content-3-5-1>).

Reply 8: We have included the following statement in both the introduction and the footnote: We present this article in accordance with the SUPER reporting checklist. (page 3 introduction,

page 6 footnote)

Comment 9: Please expand the abstract to meet our word count requirement (200-350 words). Below are some points for consideration.

(1) Start with a brief description of what the “uncinate process” is for readers unfamiliar with the term. For example, “The uncinate process is a part of the pancreas...”

Reply 9a: I have added this feedback to the abstract.

Changes in text: The uncinate process is a part of the pancreas that bends backwards and beneath the body of the pancreas in which the superior mesenteric artery and the superior mesenteric vein intersect. (page 2, abstract)

(2) The term “robotic pancreatic enucleation” could be better placed earlier in the abstract, so the reader knows right away that the focus is on a robotic surgical approach.

Reply 9b: I have added this feedback to the abstract.

Changes in text: Lesions in the uncinate process, however, can be quite challenging to access through standard open and laparoscopic approaches compared to a robotic approach. (page 2, abstract)

(3) The term “sleeve duodenectomy” is mentioned without context. It would help to briefly explain its relevance or significance in the procedure, especially for readers who might be unfamiliar with this particular surgical technique.

Reply 9c: I have added this feedback to the abstract.

Changes in text: An associated sleeve duodenectomy, which is resection of the duodenum in a sleeve fashion to allow for jejunal anastomosis, is also performed for reconstruction in this operation. (page 2, abstract)

(4) If this technique has been used, even in a preliminary way, it’s helpful to mention results or benefits, even if briefly. For instance: “Our novel approach provides better visualization, reduced surgical time, or improved patient outcomes compared to traditional methods.”

Reply 9d: I have added this feedback to the abstract.

Changes in text: This novel approach provides better visualization with faster recovery times compared to traditional methods. (page 2, abstract)

(5) Clearly state the innovation or the main contribution of your paper.

Reply 9e: I have added this feedback to the abstract.

Changes in text: Our main contribution is to allow surgeons to replicate this technique for tumors of this type and location. (page 2, abstract)

Comment 10:

Introduction: It might be helpful to briefly describe or define terms that not all readers might be familiar with, such as “uncinate process” and “sleeve duodenectomy”.

Reply 10a: I have added this feedback to the introduction.

Changes in text: This technique, however, becomes much more difficult when the lesion is located in the uncinate process where the duodenum and mesenteric vasculature restrict access to this portion of the pancreas.<sup>6</sup> The uncinate process is a part of the pancreas that bends

backwards and beneath the body of the pancreas in which the superior mesenteric artery and the superior mesenteric vein intersect. Herein, we describe a novel approach to robotic pancreatic enucleation of the uncinate using a transmesenteric technique. An associated sleeve duodenectomy, which is resection of the duodenum in a sleeve fashion to allow for jejunal anastomosis, is also for reconstruction purposes. (page 4, introduction)

Introduction: Briefly touching upon the historical or traditional approaches to such tumors and the outcomes or complications that were associated with them in the Introduction. This helps to reinforce the significance of your new technique.

Reply 10b: I have added this feedback to the introduction.

Changes in text: Notably, patients who undergo these open approaches have increased postoperative pain and longer hospitalization times. (page 4, introduction)

Introduction: The issue of restricted access to the uncinate process is mentioned. It might be valuable to emphasize more on why this poses a challenge in surgical procedures and the repercussions of not being able to address tumors in this location adequately.

Reply 10c: I have added this feedback to the introduction.

Changes in text: This technique, however, becomes much more difficult when the lesion is located in the uncinate process where the duodenum and mesenteric vasculature restrict access to this portion of the pancreas. The uncinate process is a part of the pancreas that bends backwards and beneath the body of the pancreas in which the superior mesenteric artery and the superior mesenteric vein intersect. (page 4, introduction)

Comment 11: Consider breaking the “Surgical Technique” section down with subheadings for clarity. For instance: Preparation, Access & Visualization, Enucleation, and Reconstruction.

Reply 11: I have added this feedback to the surgical technique section.

Changes in the text: “*Preparation. Access & Visualization. Dissection & Enucleation. Reconstruction. Closure.*” (page 5 & 6, surgical technique headings)

Comment 12: Expound on why each tip or trick is recommended. For instance, the suggestion about the round ligament is intriguing. Briefly explain how it aids in the procedure and any advantages it offers.

Reply 12: I have added this feedback to the tips and tricks section.

Changes in text: “This reinforces the repair and adds an extra layer of protection.” “This helps identify important anatomic landmarks for the resection and reconstruction along with avoiding inadvertent injuries.” “This helps avoid inadvertent injuries.” (page 7, tips and tricks)

Comment 13: If applicable data exists, we suggest the addition of an “Outcome and Follow-Up” section. Describe the patient’s recovery in more detail, and what follow-up procedures are put in place. Include any long-term outcomes, if available.

Reply 13: I have added this feedback.

Changes in text: Outcomes and Follow-Up: Patients are typically discharged on postoperative day 3 with or without their surgical drain depending on amylase level to indicate leak or not.

They follow up in 1 week for surgical site check and drain removal and in 1 month for another standard postoperative check. They heal quickly from their minimally invasive surgery and given the low-grade nature of their neuroendocrine tumor, no long term follow up is necessary. (page 6, outcomes and follow up)

Comment 14: Given that this represents a novel approach, could you shed light on the learning curve pertinent to this procedure? It would be insightful to understand the number of procedures a surgeon might require to achieve proficiency with this specific technique.

Reply 14: I have added this feedback

Changes in text: Limitations of this paper are that a surgeon needs to have experience with pancreas resections from an open and robotic perspective prior to attempting this technique. Pancreatic surgeons must be experts at this operation in the open approach before advancing to the robotic approach. (page 7, discussion)

Comment 15: If possible, suggest any potential future studies or case series to validate the benefits of this technique across a larger population or for other pancreatic lesions.

Reply 15: I have added this feedback.

Changes in text: Future studies are necessary to compare the outcomes and benefits to this robotic approach compared to laparoscopic and open approaches. (page 7, discussion)

Comment 16: We greatly appreciate the valuable surgical video you've provided. Might you consider separately supplying imaging data related to pre- and post-operative evaluations? This would enable our readers to gain a clearer understanding of the surgical case at hand.

Reply 16: I have attached a preoperative image.