

Reviewer #1:

**Scientific Quality:** Grade C (Good)

**Language Quality:** Grade B (Minor language polishing)

**Conclusion:** Minor revision

**Specific Comments to Authors:** This article pays attention on pancreatic fluid collections (PFCs) deriving from acute pancreatitis, focusing on the ones that have interventional indications such as infected PFCs, symptomatic PFCs or patients with persistent organ failure. Different minimally invasive techniques were here described in order to give recommendations on the best uses depending on the several possible contexts. The topic is interesting, as this can help managing PFCs in the different inflammatory situations on the basis of clinical involvement and stability. Author should consider the following comments:

- The first reference in the bibliography is incorrect, please check for it as you mention is the revised Atlanta classification for acute pancreatitis- *Appropriate change made in the manuscript*
- To make the reading fluent, it is better if the POINTER trial is included in the previous paragraph ("standard recommendations"): since here the main subject is to focus on the timing of drainage, it is interesting to highlight the fact that a Dutch group recently brought attention to the different outcomes on performing it earlier or later- *Appropriate change made in the manuscript.*
- Regarding the other indications about the early drainage, the metanalysis by Zhang et al. was reported. The sentence "Early MID and MID also both significantly decreased mortality and MODS rate" is not clear, please clarify it, especially to understand how early is "early" (quantify). *The term early was used quite loosely in the study and it was defined as procedures performed immediately on diagnosis or early in the course of the disease; while those that were treated in the delayed setting or where timing wasn't clear were termed as late interventions.*
- In the study reported by Liu et al., please specify the two study groups: as it is mentioned in the article at the beginning of the sentence, it seems like all patients were submitted to the same procedure of double lumen catheter. Only at the end of the phrase you state "the other group[...]". *Appropriate change made in the manuscript.*
- In the paragraph regarding the study made by Kohli et al. please explain the two groups of populations compared, as one is composed of patients who underwent only the catheter drainage positioning and the other were submitted to lavage of the catheter drainage. It is not clear in the actual form. *Appropriate change made in the manuscript.*
- In the possible application of necrolytic agents, especially streptokinase, please make a brief description of the mechanism of its necrolytic action also to explain why it could work in these cases. *Appropriate change made in the manuscript.*
- When describing the utility of abdominal paracentesis drainage, it's not clear which are the indications to proceed with this technique. Moreover, it's stated that "the reduction of fluid collection by <50% after APD was an independent predictor for the need of PCD", but it's not clear which type of fluid collection we need to address to. *Thank you very much for your comments. As suggested, we have done the appropriate change made in the manuscript.*

- About pre-PCD predicting factors, IL-6 and CRP are nominated but it could be helpful to know the cut-off values. Also, the study reported comparing the PCD success group and the failure group should be clarified. *Appropriate change made in the manuscript.*
- Correct the term “transgression” regarding arterial branches in the “complications of PCD” paragraph, preferring another word such as “rupture”. *Appropriate change made in the manuscript.*
- Correct the word “tanspapillary” in the “overview of necrosectomy” paragraph. *Appropriate change made in the manuscript.*

Reviewer #2:

**Scientific Quality:** Grade C (Good)

**Language Quality:** Grade A (Priority publishing)

**Conclusion:** Accept (General priority)

**Specific Comments to Authors:** Manuscript ID: 72686 Title: Drainage of fluid collections in acute pancreatitis: A comprehensive overview 1 Title. Does the title reflect the main subject/hypothesis of the manuscript? Yes 2 Abstract. Does the abstract summarize and reflect the work described in the manuscript? Yes 3 Key words. Do the key words reflect the focus of the manuscript? Yes 4 Background. Does the manuscript adequately describe the background, present status and significance of the study? Yes Acute pancreatitis has always been a common acute abdominal disease in clinic. It is an inflammatory reaction of pancreatic tissue digestion, edema, bleeding and even necrosis caused by the activation of pancreatin in the pancreas due to a variety of causes. The clinical features are acute epigastric pain, nausea, vomiting, fever and elevated blood pancreatin. The degree of pathological changes varies from light to light, mainly with pancreatic edema, a few serious pancreatic bleeding necrosis, often secondary infection, peritonitis and shock. Necrotizing effusion is the most important local complication. These collections should be drained in the event of infection, persistent or new organ failure, symptoms of compression or compression, and intraperitoneal hypertension. In this paper, indications, time and techniques of drainage with pancreatic fluid collection were discussed, with emphasis on percutaneous catheter drainage, and new methods and techniques for improving the effect of percutaneous catheter drainage were discussed in detail. This article provides a reference for the clinical treatment of acute pancreatitis, and can provide more help for clinicians engaged in the treatment of acute pancreatitis.

*Thank you very much for your comments.*