

## Peer Review File

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### Reviewer Comments

I have reviewed the paper and it is a thoughtful manuscript that describes an important treatment modality in the armamentarium of treating NP patients. However, I have some comments that should be addressed prior to publication:

Major comments:

Comment 1: Introduction: The authors should at a minimum state the aim of the current study; as is, the introduction is left without highlighting the purpose of the current manuscript.

Reply 1: We added some data to clarify this. Page 3, Line 26.

Changes in text: "The aim of this manuscript is to describe a minimally invasive therapeutic option for patients with necrotizing pancreatitis as well as some tips, tricks and risks. We have adopted this technique as part of the step up approach and have found it very reproducible and ergonomic."

Comment 2: Introduction: Whenever discussing the PANTER trial, it is important to mention that the mortality between groups was no different. This is a critical component of the study. Additionally, it is important to recognize the composite endpoint utilized in the study – in this study, no difference in bleeding, pancreatic fistula, or perforation were actually observed. In fact, the only difference between groups when evaluated was new onset organ failure, and in the study period long-term outcomes were not evaluated (i.e., no outcomes evaluated beyond 30 days, and VARD in most patients is often a temporizing measure, often requiring further intervention after 30-days). The reviewer would recommend revision to avoid overpowering statements when referring to the PANTER trial, as a "one-size fits all" approach to these patients does not apply.

Reply 2: We have added the suggested information about the PANTER study. Page 3 Line 22, also we deleted a line "fistula, perforation, or bleeding" Page 3 Line 20.

Changes in text: "It is important to mention that the mortality between groups was no different" and "Major complications, such as new-onset organ failure were present in 40% of patients..."

Comment 3: Methods: The authors state that most peripancreatic collections originate from the body/tail of the pancreas. They further state that necrosis of the head/neck most commonly disseminates to the right peracolic gutter. Can the authors site a reference for these statements? In one of the largest series of NP published to date, the most common site of necrosis is the neck of the gland, with equal distribution among head/neck necrosis and body/tail necrosis. Further, the distribution of peripancreatic necrosis is equal among left and right paracolic gutters.

Reply 3: Due to the lack of hard evidence, we have decided to withdraw this statement

Changes in Text: we deleted the next line: "Thereby, the left-side access to the retroperitoneum is the most frequently performed. The collections concerning the head and neck of the pancreas most commonly disseminate to the right paracolic gutter, where the right-side access is preferred"

Comment 4: General: The authors title this paper "Minimally invasive retroperitoneal necrosectomy: a safe approach for necrotizing pancreatitis" yet this is a technical paper that does not analyze the outcomes after this procedure – thus, the title should be changed as this paper does not include any data to discuss its "safety" or patient outcomes. In reality, this procedure should only be performed in experienced hands in the context of multidisciplinary discussion – life threatening hemorrhage, particularly in the setting of mesenteric vein thrombosis and left-sided (sinistral) portal hypertension is a serious concern. Beyond this, colonic injuries, gastric injuries, and inadequate drainage can significantly impact outcomes in these patients and the surgeons/clinicians managing these patients must be prepared to manage the high rate of complications observed in these patients. This article should be revised to reflect that it is solely a technical paper describing the approach and should thoroughly discuss the risks in the discussion.

Reply 4: We reconsidered our title and decided to change it to "Minimally invasive retroperitoneal necrosectomy: How do we do it?" due to the type of publication, emphasizing only the surgical technique.

Changes in text: "Minimally invasive retroperitoneal necrosectomy: How do we do it?"

Minor comments:

Comment 5: Introduction: I am not sure of the purpose of including the definition of acute necrotic collection vs. walled of necrosis in the introduction – the introduction should be succinct and this text does not add to the introduction.

Reply 5: We shorten the introduction length.

Changes in text: we deleted the next line on the Introduction "Within the first four weeks, the necrotic collections are denominated Acute Necrotic Collection (ANC); past these four weeks, the collections mature as encapsulated and well-defined wall collections, denominated Walled-Off Necrosis (WON)"

Comment 6: Introduction: In the introduction, the authors state that the PANTER trial was the first description of a step-up approach for infected pancreatic necrosis. Utilizing minimally invasive approaches, such as percutaneous drainage as a bridge to operative intervention, has been described since at least the late 1990s (Freeny et al., 1998), and this study does not represent the first description of the step-up approach. This sentence should be revised.

Reply 6: We corrected the wording.

Changes in text: we changed "the PANTER trial proposed a minimally invasive "step-up approach" for the infected pancreatic necrosis for the first time" for "In 2010, the PANTER trial compared the minimally invasive "step-up approach" with the standard treatment for the infected pancreatic necrosis, the open necrosectomy . The step-up approach was developed as an alternative to the open necrosectomy"