Peer Review File

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Reviewer A
good manuscript.

Thank you for your appreciation.

Reviewer B

Thank you for your comments. Please find below our replies.

1. The lines 74-78 introduction section about selection of laparoscopic repair or high risk vs low risk - I invite authors to read PMID: 25692444 as this paper describes what surgeons should do during the learning curve and how slowly they can liberalize the case selection i.e, early in learning curve should adopt strict criteria as the leak is devastating morbidity with mortality risk. I expect authors to add a sentence or two and discuss it.
Reply 1: *The present manuscript reports a standardized laparoscopic surgical technique for direct repair of perforated peptic ulcer in hemodynamically stable patients. With a standardized approach, we believe there is no need for modifying treatment and patient's selection irrespective of surgical experience*.

2. The ulcers >25mm have high leak rate PMID: 34988327. The WSES guidelines mention cut-off of 2 cm also. So in general if the leak risk is high, one should avoid laparoscopic repair unless one is considered expert or experienced enough. This point has to be also included either in introduction or discussion segment. Though there is no ideal cut off of ulcer size beyond which leak is high, it seems that about 2-2.5cm seems to be the cut off rather than 3cm (giant ulcer).
Reply 2: *We revised the article reporting a cut-off ulcer size of 2.0-2.5 cm. We added an explanatory comment on minimally invasive approach as per WSES guidelines in the introduction segment (lines 83-85)*.

3. In point 2. preop preparation I expect authors to mention about NG tube, urine catheter, omeprazole/proton pump inhibitor injections, oxygen etc. kind of treatment also which is important. Please add these issues. Also add about patient and family consenting and discussion of options and choices etc. Some of the blood tests results are relevant in scoring systems or they directly predict need for gastrectomy or mortality risk. For example albumin predicted need for gastric resections in one study - PMID: 27074924
Reply 3: *The aim of the present article was to describe step-by-step the surgical* technique *for a laparoscopic direct repair of a perforated peptic ulcer defect. We feel that adding too many issues not directly related to the surgical technique described may be misleading for the reader*.

4. Line 126-127 - I am very glad that your views kind of align with mine. I agree that the yield of biopsy is very low and it increases the size of ulcer unnecessarily for patient to have increased risk

of leak. Obvious cancer cases will be evident macroscopically. A local study showed that the malignancy risk is very low and not as high as older data or reports mention (for gastric ulcer). PMID: 25560748. So it is very prudent to do endoscopy after surgery and recovery.
Reply 4: *We integrated your comment and the reported article in our text (lines 139-141).*

5. Line 139-140. Good to have a drain in learning curve time and after that you may want to try without drain placement. I have stopped placing drains, just that mostly trainees do in night and I am not involved and thus though I do not place drains, my patients do have drains as trainees do the cases. I like the idea of methylene blue, but essentially it may be omitted as if you take good sutures, you don't need to do this.
Reply 5: *Thank you for your comment. As already stated before, the present manuscript reflects our current standardized practice, which include drain placement and methylene blue test.*

6. I saw videos. Sometimes we put a PNS gauze (paranasal sinus gauze) or small gauze inside via 12mm and use it to clean all the fibrin + it is useful to ensure omentum does not come into suction eyes/holes during suction irrigation.
Reply 6: *Thank you for your suggestion. So far, we have never used this "trick": we are certainly going to try it in the near future, but at this time we cannot provide an expert commentary on its usefulness.*

7. I heard the video audio saying that you take fluid for culture. Fine, most people do it. I have stopped doing it as once PPU is repaired, irrigated and cleansed, there is no need for antibiotics to continue - I stop after op unless patient is in septic shock. Secondly, I never give antifungals and the problem with fluid analysis is routine growth of candida and many doctors unnecessarily give antifungals which is feel is unwarranted. PMID: 31099700. Please discuss all the issues I mention in point 6 and 7.
Reply 7: *We agree with your observations. However, our surgical population is usually elderly, with multiple comorbidities, and with late presentation in up to 50% of cases, determining an increased infective risk. Therefore, antibiotic therapy is standardized per local protocol for all patients admitted for perforated peptic ulcer.*

Editorial comments

This paper is well-written and shows a direct technique for closure of perforated peptic ulcer in great detail, and shares many actions recommended. Thanks to the authors for their careful writing.

1. Since this article focuses on the surgical technique, authors are advised to add "direct repair surgical technique" to the Title.
Reply 1: *We revised the title accordingly.*

2. The authors state in the Introduction that the purpose of this article is to show a simple and direct technique for closure of perforated peptic ulcer, but it's necessary to explain whether the proposed surgical technique is novel or modified, including whether any modifications have been made to key devices or materials. As reviewer B mentioned that no new technique is presented in this

manuscript, the authors need to state what highlights and additions have been made in this article compared to previous sources (e.g. visualize the key steps in a step-by-step and self-explanatory manner). It is strongly recommended to do this both in the abstract and in the introduction.
Reply 2: *Article modified accordingly in both the abstract and the introduction segment.*

3. "A laparoscopic first approach may be selectively adopted in hemodynamically stable patients [3-4,10]". Authors fail to describe what minimally invasive closure techniques are available for perforated peptic ulcers. We do not know what the first approach refers to. Furthermore, before carrying out "The aim of this article and its related video is to show a simple and direct technique for closure of perforated peptic ulcer", authors are advised to specify the limitations of other techniques or why it is necessary to demonstrate this simple and direct closure technique.
Reply 3: *The laparoscopic-first approach has been further specified in the text (lines 80-81). Closure techniques are already reported in the discussion segment. The aim of the article is further specified in the introduction segment (lines 89-91).*

4. In the Introduction, " However, patient selection is crucial for guaranteeing the best outcomes. In general, patients with shock at admission, late presentation (> 24 hours after the onset of symptoms), older age (> 65-70 years), American Society of Anesthesiologists (ASA) score III or IV, high Boey score (≥ 2) or high PULP score (≥ 8), should be considered high-risk patients", we are not sure if this description refers to indications for this surgical technique and we suggest that the authors clearly state this in the preoperative preparation and requirements; in addition, we hope that the authors can provide the team's qualifications and learning curve.
Reply 4: *Indication for surgery further specified in both the introduction (line 80) and the preoperative preparation and requirements segments (line 98). Team qualifications and learning curve provided in the discussion segment (lines 204-209).*

5. If applicable, we recommend authors describe in detail postoperative monitoring specifically related to the surgical technique (e.g., examination, and nursing required).
Reply 5: *Postoperative monitoring is reported in the dedicated section: no specific consideration related to the surgical technique is required. We further elaborated the statement on surgical drainages (lines 164-175).*

6. It's good for authors to specify how to prevent postoperative intra-abdominal collections in the Implications and actions recommended. If exist other potential postoperative complications, please state them in the Postoperative Considerations and Tasks section.
Reply 6: *Comment provided as requested (lines 224-226).*

7. "Although traditionally associated with longer operative times... seems to be on the decline as laparoscopic experience is progressively increasing among younger generations of surgeons", in the authors' clinical practice, how long is the mean operative time?
Reply 7: *Comment provided in the discussion segment (lines 206-208).*

8. The Discussion section is well-organized. It's especially nice that the authors specify how to deal with possible intraoperative situations. In addition to it, we sincerely hope the authors can also share their suggestions for improvement on this surgical technique, which may be useful for future studies.
Reply 8: *We propose direct laparoscopic closure of the ulcer defect using barbed absorbable sutures, although current literature data on this approach are sparse. Appropriate comment has been inserted in the text (lines 217-220).*

9. In the Video, please add operate date at the beginning, and the informed consent and ethical approval statements at the end.
Reply 9: *Video modified as per request.*

10. The authors refer to the video only in this sentence in the text: " The aim of this article and its related video is to show a simple and direct technique for closure of perforated peptic ulcer". The authors should have referred to the video in the Step-by-step description section.
Reply 10: *Video cited in the step-by-step description*.