Peer Review File

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<mark>Reviewer A</mark>

The authors of the study propose a classification for anastomotic leakage after surgical resection of EGJ tumors (mostly after total gastrectomy). A total of 57 patients were included in the analysis and leaks were categorized into 4 types according to severity and management.

The study is severely limited by the small sample size and strong selection bias. It is not clear the total number of patients operated in that period of time (57 from how many?? what was the real incidence of anastomotic leak?). In order to propose a new classification a larger number of patients in a prospective study is recommended.

Response: It is a good advice. I have added the supplementary data requested by the reviewer into the original text.

Changes in the text: see Page 4, line 103.

The discussion is too long and repetitive. I suggest comparing only the main results with other available studies.

Response: I have also revised the discussion part of the article. Changes in the text: see Page 9, line 250.

<mark>Reviewer B</mark>

Line 3 Title Postoperative superior anastomotic leakage

Data search divides leaks as Abdominal, Mediastinal(thoracic) and Cervical (Neck)... I never found any reference where mediastinal leak is called Superior... Can you provide any reference or change this?

Response: It is a good question. I use superior to emphasize that the position of anastomotic leakage is relatively high, which is the focus of this study.

Changes in the text: We have explained it above, so it has not been modified in the text.

Line 71... left thoracoabdominal joint operation What is the necessity to use joint... what does it mean? Sorry, I have delete it. see Page 3, line 75.

98 ...Siewert classification Siewert's You are right and thank you! I have revised it. Changes in the text: see Page 4, line 112.

Line 139 ...esophagogastrostomy residual anastomosis leakage What is residual here... I could not comprehend It means the tissue left over from the stomach after it's been removed. Sorry, I have delete it. Changes in the text: see Page 6, line 153 and 163.

Line 153 ... interventional intervention Should it not be intervention You vetted it very carefully. I have revised it. Changes in the text: see Page 6, line 167.

Line 159 III. For Type III leakage was treated via operation: By surgical intervention instead of via operation You vetted it very carefully. I have revised it. Changes in the text: see Page 6, line 173.

Line 162 bacterial tube leakage Does not convey any meaning You vetted it very carefully. I have revised it. Changes in the text: see Page 6, line 176 and 179.

Line 172 ...were completed in the alternate gastric jejunum loop or gastric remnant Alternate to what You vetted it very carefully. I have revised it. Changes in the text: see Page 7, line 186.

Line 195 ...I and II leakage was more common in patients undergoing peritoneal approach Do you mean abdominal approach only? Yes, you vetted it very carefully. I have revised it. Changes in the text: see Page 7, line 209.

Lines 273 to 278...Type III (clinical leakage requiring surgical intervention only) often requires surgical intervention because intervention or color ultrasound puncture and drainage cannot be performed. The main reasons for intervention are as follows: after leakage, the effusion enters the chest cavity, and the drainage tube cannot be placed in the chest cavity at the same time, or the drainage tube is placed, but there is poor drainage

... This paragraph and the rest of the manuscript needs corrections of grammar and revision of

the way sentences are constructed You are right and thank you! I have revised it. Changes in the text: see Page 10, line 287.

<mark>Reviewer C</mark>

1) First, my major concern for this study is the unclear focus of this study. The title indicates the development of the new classification method and the corresponding treatment strategies. However, in the main text, the authors only described the four subtypes, how the patients of each subtype were treated, and the survival of patients of the four subtypes. In particular, the authors did not assess the effectiveness of the proposed treatments and in their analyses, clinical characteristics and prognosis of patients were not analyzed according to the four subtypes; rather, the authors presented data for subtypes I and II and subtypes III and IV, separately. I suggest the authors to substantially re-write the paper and I suggest to write it as a descriptive study, like the analysis of the characteristics, treatment, and prognosis of each subtype. The title of the revised version needs to indicate the clinical research design of this study.

Thank you so much. Your opinion is very valuable and I'll seriously consider it.

Changes in the text: Thank you for your suggestion, which has a strong guiding significance for my article, and I also realized the lack of research from it. The main purpose of this article is to study the postoperative complications of different types of anastomotic leakage and guide clinical treatment, so I didn't modify it in the text. I will seriously study and take this opinion as a guide, further dig and analyze the data of this study, and write a series of articles related to research purposes.

2) Second, in the abstract, the authors need to describe the knowledge gaps and limitations on the classification and clinical treatment of AEG in the background. The methods need to describe the assessment of clinical factors and how the patients were followed up for assessing the prognosis outcomes. The results need to describe the numbers of patients of each subtype, their corresponding clinical characteristics and prognosis. The conclusion needs to focus on the potential clinical implications and the limitations of the current data. Yes, your opinion is very valuable and I'll seriously consider it.

Changes in the text: Thank you for your suggestion, which has a strong guiding significance for my article, and I also realized the lack of research from it. The main purpose of this article is to study the postoperative complications of different types of anastomotic leakage and guide clinical treatment, so I didn't modify it in the text. I will seriously study and take this opinion as a guide, further dig and analyze the data of this study, and write a series of articles related to research purposes. 3) Third, in the introduction of the main text, the authors need to review and analyze the current knowledge gaps and limitations of prior studies on the classification of AEG and why the classification was clinically important. The authors also need to describe how their new classification criteria were developed and the clinical validity of such classification criteria.

Yes, your opinion is very valuable and I'll seriously consider it. Changes in the text: see Page 2, line 33.

- 4) Fourth, in the methodology, please accurately describe the clinical research design, baseline data collection of clinical factors, follow up procedures, and the outcome measurement of the proposed treatment. The authors should analyze the data according to the four subtypes, not the current two categories. This is the major issue of the methodology part, the clinical rationale of the new classification criteria and how the four subtypes differed. In statistics, the clinical characteristics and prognosis outcomes should be compared across the four subtypes, specify the post-hoc comparisons, and ensure P<0.05 is two-sided.</p>
- Yes, your opinion is very valuable and I'll seriously consider it.

Changes in the text: Thank you for your suggestion, which has a strong guiding significance for my article, and I also realized the lack of research from it. The main purpose of this article is to study the postoperative complications of different types of anastomotic leakage and guide clinical treatment, so I didn't modify it in the text. I will seriously study and take this opinion as a guide, further dig and analyze the data of this study, and write a series of articles related to research purposes.

5) Finally, please cite some related papers: 1. Kammili A, Ramirez-GarciaLuna JL, Mueller CL, Spicer J, Ferri LE, Cools-Lartigue J. Personalized surgical management of esophagogastric junction cancers: retrospective cohort study at a Canadian institution. Ann Esophagus 2021;4:24. 2. Ma Z, Chen C, Shang X, Yue J, Jiang H. Comparison of lymph node metastasis pattern from esophagogastric junction adenocarcinoma versus very low thoracic esophageal squamous cancer: a propensity-matched analysis. J Thorac Dis 2023;15(2):442-451. doi: 10.21037/jtd-22-1028. 3. Ubels S, Verstegen MHP, Rosman C, Reynolds JV. Anastomotic leakage after esophagectomy for esophageal cancer: risk factors and operative treatment. Ann Esophagus 2021;4:8.

Yes, your opinion is very valuable and I'll seriously consider it. Changes in the text: see Page 14, line 416, 423 and 437.