

We really appreciate your helpful comments for improving our manuscript. We agree with your suggestions and have made our best effort to revise the manuscript accordingly. Our point-by-point responses to the comments are below.

**Reviewer 1:**

**Major comment 1:** There is no info on how the anastomosis where performed. Same technique irrespective of the reconstruction method and level?

**Reply:** We have added the anastomosis details for both the transthoracic and transhiatal approaches to the “Methods” section as follows: “Moreover, we usually performed intrathoracic anastomosis in the cervical site by hand sewing but have elected to use a circular stapler in some cases. For the transhiatal approach, we performed an esophagogastrostomy or double-tract or Roux-en-Y reconstruction because of the anatomical factors.

Esophagogastrostomy was done mainly using the double-flap method with hand-sewn anastomosis. Double-tract or Roux-en-Y were performed using a circular stapler, hand -sewn or linear stapler.” (page 8).

**Major comment 2:** There is no info if leaks are actively searched (routine tests) or only based on clinical suspicion.

**Reply:** We routinely performed esophagogastric roentgenography and computed tomography for 7 days after surgery to assess the presence of any complications, including anastomotic leakage. We have added this detail to the “Methods” section (page 8).

**Major comment 3:** I got lost during the description of what the authors called "transhiatal approach". Is it a total gastrectomy with extension to the distal esophagus and reconstruction with the jejunum???

**Reply:** Transhiatal procedures are approached from the abdominal side. In this approach, we performed a total or proximal gastrectomy with resection of the distal esophagus. We used the jejunum for the double-tract or Roux-en-Y reconstruction or performed an esophagogastrostomy. We have added this information to the “Methods” section (page 8).

**Major comment 4:** One point must be discussed in order to understand the results; Thoracic anastomotic leak was associated to decreased survival AND larger tumors. Can the lower survival be attributed only to staging and anastomotic leak is an epiphenomenon?

**Reply:** Although tumor diameter is associated with anastomotic leakage, pStage is not a significant risk factor. Moreover, anastomotic leakage was a significant predictor for oncological outcomes, independent of TNM stage, according to the multivariate analyses. Therefore, we concluded that anastomotic leakage also is associated with survival, in addition to pStage. We have added this information to the “Discussion” section (page 13).

**Minor comments1:** et al. not et al

**Reply:** As per your comment, we have modified this phrase (page 12).

**Minor comments2:** Readers are probably more used to the Siewert classification for EGJ tumors. The authors should mention and probably compared both classifications.

**Reply:** We have used Nishi's classification in this study; however, the Siewert classification has been adopted mainly in Western countries as the histological type is predominantly adenocarcinoma. Although an EGJ tumor defined by Nishi's classification and Siewert Type 2 is almost similar, the tumor epicenter with Nishi's classification is 1 cm higher than is that of Siewert Type 2. Therefore, performing intrathoracic anastomosis may be difficult in EGJ cancer defined with Nishi's classification versus Siewert Type 2 cancer, and the relationship between survival and anastomotic leakage may be weak if only patients with Siewert Type 2 cancers were enrolled in the study. We have added this information to the "Discussion" section (page 13).

**Science editor:**

**Comment1:** I found no "Author contribution" section. Please provide the author contributions

**Reply:** According to the editor's suggestion, we have provided an "Author Contributions" section.

**Comment2:** I found the authors did not provide the original figures. Please provide the original figure documents. Please prepare and arrange the figures using PowerPoint to ensure that all graphs or arrows or text portions can be reprocessed by the editor

**Reply:** We have added the original Figures using PowerPoint.

**Comment3:** I found the authors did not add the PMID and DOI in the reference list. Please provide the PubMed numbers and DOI citation numbers to the reference list and list all authors of the references. Please revise throughout

**Reply:** We have provided the PubMed numbers and DOI citation links in the References list, providing all reference authors. Only Reference 17 has no DOI and PMID, because this reference is a book.

**Comment4:** I found the authors did not write the "article highlight" section. Please write the "article highlights

**Reply:** We had added the "Article Highlights" section at the end of the main text, as follows:

***"Research background***

Despite improvements in surgical techniques and perioperative management, complications

after surgery for esophagogastric junction (EGJ) cancer remain high because of technical difficulty.

### ***Research motivation***

No study has shown the impact of postoperative complications on the long-term outcomes of patients with EGJ cancer.

### ***Research objectives***

The aim of this study is to investigate the impact of postoperative complications, such as anastomotic leakage and pneumonia, on the long-term outcomes of patients with EGJ cancer.

### ***Research methods***

We retrospectively analyzed 122 patients who underwent surgery for EGJ cancer, investigating the relationship between postoperative complications and long-term oncological outcomes.

### ***Research results***

We identified anastomotic leakage as a significant risk factor for death and cancer recurrence. We did not observe this tendency in patients who underwent cervical anastomosis but did see this tendency in patients who underwent intrathoracic anastomosis.

### ***Research conclusions***

Postoperative anastomotic leakage was significantly associated with long-term oncological outcomes in patients with EGJ cancer. Cervical anastomosis with esophagectomy may be an option for patients with a high risk of anastomotic leakage.

### ***Research perspectives***

A prospective study is needed to confirm the relationship between postoperative complications and long-term outcomes of patients with EGJ cancer.”