

## Response to reviewers

We wish to express our strong appreciation to the reviewers for their insightful comments on our paper. We feel the comments have helped us significantly improve the paper. The correction is noted below point by point.

Reviewer #1:

### **Specific Comments to Authors:**

■ Congratulations to the authors who performed a correct systematic review thus summarising what is the treatment of a very rare acute pathology.

→Thank you very much for providing important comments.

We are thankful for the time and energy you expended.

Reviewer #2:

### **Specific Comments to Authors:**

■ Not all keywords follow MeSH requirements, authors should check it (link: <https://www.ncbi.nlm.nih.gov/mesh/>).

→We appreciate the reviewer's comment on this point.

In accordance with the reviewer's comment, we have changed the key words to esophageal perforation, Boerhaave syndrome, shock, self expandable metallic stent, anastomotic leakage, minimally invasive surgical procedures.

■ As it known that during the conducting of systematic review authors should follow PRISMA item(link to checklist: [http://prismastatement.org/documents/PRISMA\\_2020\\_checklist.pdf](http://prismastatement.org/documents/PRISMA_2020_checklist.pdf)). According to this checklist, I recommend to authors provide a table with keywords and Boolean operators, to show the search strategy for each database.

→We thank the reviewer for this comment. We have added the term (“Boerhaave syndrome” OR “spontaneous esophageal perforation”) as key words and Boolean operators in Figure1.

■ The authors haven't provided any justification for using only three databases (Pubmed, Cochrane Library, and Medline). It requires any explanation or authors should include articles from other databases. -And there is necessity to give explanation why only period from 2017 to 2022 was chosen to search articles.

→Thank you for your suggestion.

We added Google scholar database. we checked for duplicates with other databases. We have added Google scholar database to Figure1.

Our systematic review title is Current approach for Boerhaave syndrome. Therefore, we choose the articles only period from 2017 to 2022.

■ Absence of assessing the risk of bias ( lack of the quality assessment) to establish the evidence of results and analysis.

→Thank you for your suggestion.

This study was systematic review of case reports.

We could not assess the risk of bias such as RCT in detail.

Instead, the percentage of lacking information in case reports is indicated in the methods.

Quality appraisal

The overall quality of the cases was good to moderate. Most cases reported an adequate description of the chief complaint (100%), the patient's medical history (82.1%), the sex (98.2%), the length from symptom onset (98.2%), the length of the hospital stay (76.8%), imaging findings (100%), treatments (100%), and outcomes (100%).

■ The authors indicated that the study design, patient's demographic data, intervention related data, and outcomes were extracted from the included 49 studies. However, there is a necessity to add the table with included to analysis articles with variables which were analyzed.

→Thank you for your suggestion. You have raised an important question.

We added tables with descriptive comparative characteristics of all included 49 studies. (Table1)

■ Authors should provide results of the assessment of the risk of bias.

→Thank you for your suggestion.

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We could not assess the risk of bias such as RCT in detail.

Instead, the percentage of lacking information in case reports is indicated in the methods.

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■ The quality of tables not so good, tables were presented as images. As I mentioned above these tables give common information.

→ thank you for your suggestion.

All tables were changed.

■ In this situation it will be appropriate to add tables with descriptive comparative characteristics of all included 49 studies and demonstrate some variables.

→ Thank you for your suggestion. You have raised an important question.

We added tables with descriptive comparative characteristics of all included 49 studies. (Table 1)

■ In the figure 1 (study selection flow chart) I suggest to authors to use standard flow diagram

(<https://prismastatement.org/prismastatement/flowdiagram.aspx?AspxAutoDetectCookieSupport=1>). Because, in this manuscript figure 1 a bit isn't informative, by the reason is information regarding duplicates, and etc. were missed.

→ Thank you for your suggestion. You have raised an important question.

Figure 1 was corrected according to PRISMA statement.