

## Peer Review File

**Article information:** <https://dx.doi.org/10.21037/med-22-27>

### Review Comments

#### Reviewer A

I read the review entitled "Surgical Indications for Mediastinal Cysts – a Narrative Review" and I appreciated the way the authors didactic described mediastinal cystic lesions. Therefore, I choose to publish the study that appears to have been carried out with good technical standards.

[Reply: Thank you. We appreciate your time and dedication to reading our review.](#)

#### Reviewer B

This is a well-organized review. Although there are no new findings, it summarizes the evidence for mediastinal cysts, which are underestimated in the literature. The paper is considered worthy of adoption.

[Reply: Thank you very much for your time and feedback.](#)

#### Reviewer C

This is a very nice summary of literature. I believe it will add to the knowledge and treatment of these disease processes. Well done.

[Reply: Thank you.](#)

#### Reviewer D

1.Indeed, the diagnosis of mediastinal cysts is more difficult. I'm curious if there were any cases of incorrect diagnosis among the case reports included in this review? It's suggested that the authors also consider discussing the included studies from an objective perspective. Specifically, which are more trustworthy while others are not? Have authors considered some (even the simplest/most obvious) limitations/quality of this evidence?

[Reply 1: Thank you for suggesting the review of these relevant topics.](#)

[The majority of the studies presented in this review are limited by their retrospective nature. The low incidence of mediastinal cysts and difficult pre-operative diagnostic work up makes the design and accrual for prospective studies difficult. We did not encounter reports that mentioned cases where a pathologic diagnosis made](#)

preoperative differed from the definitive diagnosis postoperatively.

In our summary section we discuss the most important limitation of this topic- the existing literature on surgical indications are retrospective observational case series or case reports.

We highlighted the most relevant case series included in this report. The single institution retrospective study of 117 cases of thymic cysts and a series of 103 pericardial cysts highlighting their natural history with regard to their changing size in a retrospective study,

Changes in text: We added our intention to collect data from prospective studies by editing our methods section (page 4, line 78). We expanded on the findings by Wang et al. in their case series of 117 cases of thymic cysts and the relationship between size and symptoms (page 5-6; lines 110-121). We also expanded on Alkharabsheh et al's case series of pericardial cysts and their natural history (page 10; lines 230-239).

2.This article was very meaningful. It is suggested that the authors briefly discuss the surgical approach. For example, to avoid morbidity, it seems prudent that surgeons attempting minimally invasive approaches should maintain a low threshold to convert to open surgery particularly for large cysts or cysts where dissection planes are not clear between the cyst and adjacent critical structures such as bronchial or esophageal walls. This seems to be in line with the objective of this review-"to help clinicians determine the best treatment for individual patients". It would be better if the authors could make a table or a flow chart (i.e., "a framework") to help readers who are also surgeons make decisions. For example, patient symptoms, diagnostic approach (CT/MRI), recommended management, appropriate surgery (VATS/RATS/open surgery), precautions, etc.

Reply 2: Thank you for your comment. These series of manuscripts related to mediastinal cysts include several articles addressing specific topics. The different surgical approaches and utility of diagnostic tools will be addressed in separate review articles.

3. The authors could consider adding "Surgical Indications" to the Keywords

Reply 3: Thank you very much for your suggestion.

Changes in text: We have added "Surgical Indications" to our Keywords section (page 2; line 47)

4. Please check the entire manuscript to address similar citation issues as below.

(1) Lines 122-123: "Although there are reports of thymic malignancies originating from simple cysts". Please add an in-text citation/reference to back up this claim.

(2) Lines 147-148: "Of note, although there are case reports of biopsy site seeding with a percutaneous biopsy of thymic malignancies, the rate of such events is very

low". Please add in-text citations/references for these case reports.

Reply 4: Thank you for your thorough review.

Changes in the manuscript: We have added in-text citations to the above-mentioned sentences. We have reviewed the rest of the manuscript for similar citation issues and have made additions to our citation/references as appropriate.