Peer Review File

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<mark>Reviewer A</mark>

Thank you for your comments.

• Comment 1. The authors described the delay of therapeutic intervention due to the COVID-19 pandemic in the results. Which five cases were treated during the COVID-19 pandemic? Please indicate in the table.

Reply 1: Cases 2, 3, 4, 5 and 6 were treated during the COVID-19 pandemic.

Changes in the text Indicated in the table.

• Comment 2. The relationship between DNM and the COVID-19 pandemic is a novel finding. Please discuss this in more detail.

Reply 2: No relationship between COVID-19 infection and an increased incidence of DNM has been reported in the literature. In the same way that an increase in diagnoses in the advanced phase of many neoplasms was observed during COVID-19 pandemic, we mainly attribute the increase of incidence of DNM to the patient's delay in consulting a medical service and, therefore, to the progression of the underlying disease process.

Changes in the text: Discussion: 263-265

Comment 3. "CPRs" in the result and in Fig.5 are probably CRP. Please check them.
Reply 3: Yes, you are right. Appropriate changes have been made to the figure and the text.
Changes in the text: Appropriate changes have been made to the figure and the text.

Reviewer B

This is a retrospective case series describing presentation and treatment of seven patients with descending necrotizing mediastinitis. The authors emphasize utility of minimally invasive thoracic approaches to treat thoracic extension of infection and reduce mortality. The key strength of this paper is its description of surgical detail regarding thoracic approaches to mediastinal drainage, as well as imaging indications for these approaches. Its key weakness is small sample size which does not allow for statistical analysis.

Results, general comments:

• Comment 1: Were procalcitonin levels available for your cohort? If so, would be helpful to include. If not, please explain why procalcitonin levels are not included here since you mention that they can be helpful markers of disease.

Reply 1: We have not included procalcitonin levels in our series of patients because they were not requested and followed in all of them. However, we do advise the importance of always requesting them given their great predictive value both in the diagnosis and in the follow-up and prognosis of patients with DNM.

Changes in the text: Appropriate changes have been made in Discussion 322-325

• Comment 2: I agree that it is difficult to perform meaningful statistical analysis of a cohort of 7 patients. However, I'm curious if there was any correlation between medical comorbidities and extent of infection at presentation as well as need for re-operation. Are you able to comment on this?

Reply 2: Indeed, patients with additional comorbidities presented greater extension of the infection and, therefore, required a greater number of reoperations. Despite not having done a statistical study, we have tried to reflect this fact in the text.

- In the results section at line 159, the authors reference the COVID-19 pandemic and relationship between the pandemic and delay in hospital presentation. This speculation, while interesting, is more appropriate for the discussion section.
- Line Comments: Totally agree. We have removed this sentence from the results section and included it in the discussion section.
- Line 45: The first sentence of the methods is an incomplete sentence; please revise. We have made the appropriate changes to the text.
- Line 58: For reoperation (3 patients, 33%), please clarify what the denominator is here, since there are 7 total patients in the cohort. We have made the appropriate changes to the text.
- Line 60: Believe CPR should be "CRP" here. We have made the appropriate changes to the text.
- Line 89: Consider changing to "despite timely correct diagnosis". We have made the appropriate changes to the text.
- Line 99: Consider rephrasing to "especially the role of a transthoracic approach" We have made the appropriate changes to the text.
- Line 114: Change "consecutives" to "consecutive" We have made the appropriate changes to the text.
- Line 149: Change to "all patients presented with dysphagia, fever, and respiratory insufficiency associated with a severe cervical infection." We have made the appropriate changes to the text.
- Line 181: Change to "According to the Endo's classification, an infection localized to..." We have made the appropriate changes to the text.
- Line 185: Change to "In three patients the infection spread into the pleural cavities." We have made the appropriate changes to the text.
- Line 189: Consider deleting the phrase, "In three patients the infection spreads into the pleura," as you state this above in line 185. We have made the appropriate changes to the text.
- Line 190: Change to "All patients underwent surgery to debride and drain the neck, pleural

and mediastinal collections." We have made the appropriate changes to the text.

- Line 214: "Reoperation was required in 3 (33.3%) cases." As above, what is the denominator for this statistic, given that the total case series was 7 patients? We have made the appropriate changes to the text.
- Line 214: "In all three cases the cause of the reoperation lack of the control of the general septic syndrome, pleural empyema and 216 cervical and/or mediastinal persistent drainable fluid collections." This sentence is unclear; please rephrase. We have made the appropriate changes to the text: It was indicated for poor control of the general septic syndrome, the presence of pleural empyema and persistent draining cervical and/or mediastinal fluid collections.
- Line 219: Believe CPR should be "CRP" here. We have made the appropriate changes to the text.
- Line 229: Consider changing "presented" to "experienced" We have made the appropriate changes to the text.
- Line 230: Consider rephrasing to "the most common of which were dysphagia..." We have made the appropriate changes to the text.
- Line 259: Again, believe this is meant to be CRP. We have made the appropriate changes to the text.
- Line 275: Consider changing to "consisting of a combination..." We have made the appropriate changes to the text.
- Lines 314-318: These limitation statements are incomplete sentences; please revise. We have made the appropriate changes to the text.
- Lines 323-325: This summary sentence is convoluted with a few grammatical errors which make it difficult to understand; please revise. We have made the appropriate changes to the text.

Figure 1: It may be helpful to represent Endo's classification in the form of a figure rather than a table, if possible. We add a figure of the Endo's classification in replacement of the table. The painting has been done by a professional painter and is a reproduction of the original. CT pictures are of the patients included in the study.

Figure 5: Again, believe CPR should be "CRP" throughout this figure. Also, you mention that the main parameter that indicated a poor clinical evolution in patients requiring re-operation was an increase in CPR three days after appropriate antibiotic treatment was started. It would therefore be meaningful to indicate on the figure which patients required re-operation. We have made the appropriate changes.