

Peer Review File

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Reviewer comments

A tracheal obstruction due to airway emergencies is rare, but it would be life-threatening when they occur at once. A suction by the catheter may not remove the clot in the lower airway. The author used an endotracheal tube and a meconium aspirator to relieve a complete tracheal obstruction from a blood clot. I think it is a suitable method in terms of rapidity and certainty. Moreover, other doctors should put this method in mind.

Major issues:

1. Title

The current title may be revised to better specify the technique used, for example: “Successful Management of Tracheal Blood Clot Obstruction using a Meconium Aspirator: A Case Report”.

Reply 1: Thank you for the suggestion, the title has been updated.

Changes in the text 1: page 1, lines 11-12

2. Abstract

(1) While the abstract discusses the rarity and importance of tracheal obstructions, it might be worth highlighting more explicitly why this case is noteworthy or unique.

Reply 2(1): We appreciate the suggestion and have updated the abstract as advised.

Changes in the text 2(1): page 2, lines 40-51

(2) Providing some patient-specific information might make the case more engaging and provide some context. For example, what was the age, sex, race, the specific time and date of the emergency incident, or health condition of the patient? What led to the massive pulmonary hemorrhage?

Reply 2(2) We had originally not included this as we did not feel it was directly relevant to the technique. However, we appreciate the suggestion and have added more background details about the case. We did not include specific dates/times in the interest of privacy protection.

Changes in the text 2(2): page 2, lines 52-54

(3) While you describe the technique used, including more specific details might make it clearer. For example, how did you attach the meconium aspirator to the endotracheal tube? How quickly was the technique assembled and deployed?

Reply 2(3): We appreciate the suggestions. Additional details have been added to the abstract.

Changes in the text 2(3): page 2, lines 57-79

(4) While it's mentioned that the technique was successful, it may be worth providing more specifics. How quickly did the patient's condition improve? What was the patient's condition at discharge?

Reply 2(4): Thank you for the suggestion, we have added additional specifics and timeline.

Changes in the text 2(4): page 2, lines 61-81

3. Please include "case report" as a keyword.

Reply 3: This has been added, as advised.

Changes in the text 3: page 1, line 26

4. Introduction

(1) It's crucial to address the prevalence of airway obstructions due to blood clots and their potential impact on patients. This will help provide a broader context to the issue.

Reply 4(1): Thank you for the suggestion, we have added more detail regarding prevalence and impact on patients.

Changes in the text 4(1): Please see page 3, lines 89-97

(2) While you mentioned that bronchoscopic methods, suction, basket retrieval, or cryotherapy are time-consuming and difficult to deploy, it would be helpful to elaborate on these limitations further.

Reply 4(2): We appreciate the suggestion and have added a discussion of the limitations.

Changes in the text 4(2): page 3-4, lines 98-165

(3) The statement, "To our knowledge, this technique has not been reported in critical care literature," requires comprehensive and rigorous research. And we found a case report (PMID: 33483196) in PubMed that employed a similar technique. Please revise this statement accordingly.

Reply 4(3): Thank you for bringing this up. We are aware of the article you mention and it is actually already cited in our paper. That article is from the emergency department, while our case is from the intensive care unit. The point of the statement was therefore to note that no *critical care* literature had previously described this technique. However, we understand that the statement may be confusing and have revised accordingly.

Changes in the text 4(3): page 4, lines 171-173

(4) Finally, make sure to state what this case report will present or explore. For example, “In this case report, we present the novel use of a meconium aspirator in the successful management of a life-threatening tracheal obstruction due to a blood clot.”

Reply 4(4): The introduction did already include a statement “We report the use of a meconium aspirator attached to the patient’s in situ endotracheal tube (ETT) and wall suction to successfully extract a blood clot causing complete tracheal obstruction” however the introduction has been reworded to make the topic of the case report more clear.

Changes in the text 4(4): page 4, lines 171-173

Please cite relevant literature in the Introduction according to the above comments.

5. Case Presentation

(1) Please specify the patient’s background (e.g., race, lifestyle, occupation, etc.) if relevant. This context could provide insights into the patient’s overall health status and may explain some of his conditions such as intravenous drug use and Hepatitis C.

Reply 5(1): We have added additional background to the description of the patient. We appreciate the suggestion but feel that further background is not relevant to the case/technique description.

Changes in the text 5(1): page 6, lines 332-333

(2) Please add a description about the primary symptoms when admitting (e.g., fever, abdominal pain).

Reply 5(2): Thank you for the suggestion, this has been added. We originally did not include this as we did not feel it was explicitly relevant to the description of the meconium aspirator suction technique.

Changes in the text 5(2): page 6, lines 333-334

(3) Clearly mentioning the time course of the events could help readers to follow along with the progression of the patient’s condition and understand the severity and the urgency of the situation.

Reply 5(3): We appreciate the suggestion. More detail has been included about the patient’s clinical status and progression.

Changes in the text 5(3): pages 6-8, lines 342-578

(4) Please elaborate more on the clinical reasoning behind each step taken. For instance, how was the decision to extubate and re-intubate made? What led to the decision to use a meconium aspirator, and were there any other options considered? This will help readers understand not just what was done, but why these specific actions were taken.

Reply 5(4): We agree with the recommendations and have added additional detail about the clinical reasoning on why each step was taken.

Changes in the text 5(4): Pages 6-8, lines 342-578

(5) More details about the patient's hemodynamic status throughout the ordeal might be helpful. What was the patient's blood pressure, heart rate, oxygen saturation, etc., during the critical moments? This could help in painting a clearer picture of the severity and urgency of the situation.

Reply 5(5): Thank you for the suggestion, we have added more clinical details about the patient's clinical status. This is noted in the case description.

Changes in the text 5(5): pages 6-8, 342-578

(6) If available, please provide bronchoscopic images before and after the clot extraction to better illustrate and compare the patient's condition.

Reply 5(6): Unfortunately, we do not have these images due to the emergent nature of the procedure.

(7) You could potentially add more about the patient's status at discharge - Was his condition stable? Were there any lingering issues or potential complications to watch out for?

Reply 5(7): We have included additional follow up details at discharge and noted that there were no additional problems with hemoptysis. Thank you for the suggestion.

Changes in the text 5(7): page 8, lines 578-586

6. Discussion

Similar to Comment 4-3, you may want to consider comparing and discussing your case with the case presented in PMID: 33483196, and remove the statement about no similar methods being previously reported.

Reply 6: As above, this case was already cited. We have adjusted the statement as advised.

Changes in the text 6: page 8, lines 591-592

7. Formatting issues:

(1) The authors are advised to redraft and resubmit a fully completed version of the CARE checklist, as the current submission appears to contain many blank entries. Please specify the corresponding section or paragraph in the manuscript for each item.

Reply 7(1): This has been completed.

(2) The abstract should be structured with: Background: state what is known and

unknown; why the case report is unique and what it adds to existing literature; Case Description: describe the patient's demographic details and main history, the main diagnosis, interventions, outcomes and follow-ups; and Conclusions: summarize the main take-away lesson, clinical impact and potential implications. Meanwhile, the abstract should be within the range of 200-350 words.

Reply 7(2): This has been completed, thank you for the suggestion.

Changes in the text 7(2): page 2-3, lines 40-84

(3) The third point in the Highlight Box should not be "What is the implication, and what is new?". It should be "What is the implication, and what should change now?".

Reply 7(3): Thank you for catching this, this has been changed.

Changes in the text 7(3): page 5

(4) Please change the "Background" section of the main body to "Introduction".

Reply 7(4): thank you for catching this, we have changed the section title as advised

Changes in the text 7(4): page 3, line 86