

Dear editor:

We have studied your e-mail carefully and have made revision which marked in the paper. Attached please find the revised version. Looking forward to hearing from you.

Thank you and best regards.

Yours sincerely,

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Dear Editors and Reviewers:

Thank you for the review of our manuscript titled: “Fatal left atrial air embolism caused by lung biopsy: A case report and review of literature” (Tracking Number: 72315) and for the helpful comments by the reviewers. We are pleased with the Editors’ decision in the letter dated 01/18/2022 to consider a revised version of our manuscript, addressing all the issues brought up by the reviewers.

Below, I will detail how we extensively revised the paper to address the comments. Changes in the revised manuscript are listed by using “track changes” programs. The main corrections in the paper and the responds to the reviewer’s comments are as flowing:

Response to the issues of Reviewer #1

Reviewer #1: Scientific Quality: Grade B (Very good)

Language Quality: Grade A (Priority publishing)

Conclusion: Accept (General priority)

Specific Comments to Authors: In the paper “Fatal left atrial air embolism caused by lung biopsy: A case report and review of literature” authors describe a rare case of systematic air embolism (SAE) occurred during a lung biopsy. The case is well described and documented moreover the authors have done a high quality revision of the (little) literature present on the argument. Thank you for the opportunity to review this nice case report!

Re: Thanks for your recognition of this article. It is our pleasure to get your positive and encourage comments.

Response to the issues of Reviewer #2:

Scientific Quality: Grade C (Good)

Language Quality: Grade B (Minor language polishing)

Conclusion: Rejection

Specific Comments to Authors: interesting case report the dangers of CT guided puncture are important, the distance between the heart and the tumor is relatively high , so rather unexpected complication however uncertainty remains if the cause of death is systemic air embolism I have doubts that the amount of air in the left atrium could be enough for this catastrophic outcome the massive hemoptysis is not adequately explained and could also be the cause of death.

Re: Thanks for your comments. Discussing the cause of death for a patient without an autopsy having been performed can be difficult. Lung biopsy can also lead to complications such as a cough, particularly if a tracheal vascular fistula is present, and there is thus the potential for arterial influx into the airway. According to surgical case records, this patient did experience significant hemoptysis (~100 mL). Furthermore, the risk of death from air embolism is dependent upon both the volume of gas and the site of involvement. Pulmonary CT scans in the present patient were only able to capture the putative air embolism in the left atrium at a single time point. We believe that even very small amounts of gas can travel from the left atrium into the coronary arteries, the intracranial arteries, and other critical vessels, and may thereby cause death. In summary, we believe that air embolism is most likely to be the cause of death in the present case and that hemoptysis may be the result of puncture-related vascular injury.

Response to the issues of Reviewer #3:

Scientific Quality: Grade C (Good)

Language Quality: Grade C (A great deal of language polishing)

Conclusion: Major revision

Specific Comments to Authors: Manuscript No.: 72315 Title: Fatal left atrial air embolism caused by lung biopsy: A case report and review of literature In this study, the author has studied “Fatal left atrial air embolism caused by lung biopsy: A case report and review of literature.” A lot of studies have already been carried out on a similar topic, and comprehensive data is available in the literature. The manuscript is very poor and not well written. Sentence making is very poor in this manuscript. The English language used in the manuscript needs major improvements as there are some punctuation and grammatical mistakes present throughout the manuscript. The figures required the proper explanation and caption. The study principle and objective are not clear. Moreover, research models are not discussed in an understandable manner, the introduction section is very poor followed by literature, which reflects that the author needs a more comprehensive way of thinking. The results are very weak and presented very poorly. The discussion part is not up to the mark and no significant comparison is made. It is obvious that the quality of the manuscript does not fulfil the standards of the journal, therefore should be rejected in its present form.

Specific comments:

1. The Abstract needs to be critically revised, there are few grammatical mistakes.

Re: Thanks for your comments. We are sorry for the mistakes. We have revised the abstract carefully.

2. Please add more strong keywords.

Re: Thanks for your comments. We have add some strong keywords.

3. The title of the manuscript reflects a ‘review of literature’, please add more relevant data in the introduction section to support the title.

Re: Thanks for your comments. We are sorry. We have revised the introduction section.

4. INTRODUCTION: The whole introduction section is general. Authors are advised to revise the introduction section carefully and add more data to make an association between each sentence to support the problem statement. It is advised to add literature in introduction section to create a research gap.

Re: Thanks for your comments. We have revised the introduction section and talk about the disease in a more comprehensive manner.

5. Page 4: What is the novelty of the present study?

Re: Thanks for your comments. Fatal air embolism formation following lung puncture is rare. In this case, radiological examinations revealed gas in the left atrium and we quickly initiated appropriate resuscitation procedures, but were unfortunately unable to save the patient's life. The purpose of this article is to increase awareness of the potential for air embolism after lung biopsy, aiding in the early recognition and proper management of this condition so as to improve overall patient survival.

6. Page 5: "A 71-year-old woman was referred to our hospital for the evaluation of a lung lesion." Please add the name of the hospital.

Re: Thanks for your comments. We have added the name of our hospital.

7. The 'Treatment' section needs a major revision, please add more appropriate data.

Re: Thanks for your comments. We have add some details of treatment.

8. The discussion section is not up to the mark, it is too long and should be moved to the introduction section. No overall conclusion and limitations are added. Overall, discussion section is very poor and need extensive revision.

Re:We have moved a part of the discussion to the introduction and have made serious revisions. The Limitations has shown in the last paragraph of discussion.

9. The present study lacks future recommendations.

Re: Thanks for your comments. The further recommendation was shown in the end of discussion paragraph.

10. Authors are advised to proofread the whole manuscript to overcome grammatical mistakes.

Re: Thanks for your comments. we have improved the English writing by native English-speaking expert in the revised manuscript.

11. The figures need proper interpretation and appropriate captions.

Re: Thanks for your comments. we have improved the interpretation and captions of the figure.

12. The figures quality is low, please improve it and must be minimum of 300 DPI.

Re: Thanks for your comments. we have adjust the DPI of figures.

13. The headings and subheadings need to be revised.

Re: Thanks for your comments. we have revised the headings and subheadings.