02nd August 2021

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Editor-in-Chief

World Journal of Clinical Cases

Manuscript ID:

69258

Manuscript Title:

Severe mediastinitis and pericarditis after endobronchial ultrasound-guided transbronchial needle aspiration: A case report and literature review

Dear Editor,

We would like to thank you for the letter, and the opportunity to resubmit a revised copy of this manuscript. We would also like to take this opportunity to express our thanks to the reviewers for the positive feedback and helpful comments for correction or modification.

We have made every attempt to fully address these comments in the revised manuscript. Reviewer's original comments are listed below, followed by our response (in red color) to each comment.

We very much hope the revised manuscript is accepted for publication in *World Journal*

of Clinical Cases.

Specific Comments to Authors: The case is interesting.

Authors' Response: Thank you for your comments. We did our best to answer all the questions and comments raised by reviewers.

Major remarks 1) Why did the patient receive prophylactic antibiotics?

Authors' Response: Thank you for your comments. We have experienced mediastinitis after EBUS-TBNA before, so we are using prophylactic antibiotics in cases of multiple needling or lymph nodes with high infection risk. As commented by the reviewer, we added explain to reason for prophylactic antibiotics in CASE PRESENTATION.

Revised manuscript (CASE PRESENTATION)

A 67-year-old woman was referred to our hospital because of lymph node enlargement on chest computed tomography (CT) (Figure 1). EBUS-TBNA of the right paratracheal lymph node was performed using a 22-gauge needle to obtain the tissue core. A total of 11 punctures were performed due to insufficient tissue cores. Prophylactic antibiotics (amoxicillin/clavulanate) were administered to prevent infectious complications after the procedure. Histological examination of the specimen revealed negative malignant cells and no bacteria.

2) Imaging, treatment and figure legend: why did you mention an infected cyst? I do not understand if you wish to refer to an abscess instead. If this is the case, please refer to it as an abscess and not as an infected cyst, as there is no mention of a cyst prior to the TBNA.

Authors' Response: We are sorry to make confusion. We changed all infected cysts to abscess in our paper.

3) Please describe the procedure in greater detail. How many passes were performed? What needle was used? Was there any technical issue during the procedure that may have caused concern for subsequent complications?

Authors' Response: Thank you for pointing out important aspects. This patient with an enlarged, homogeneous right paratracheal lymph node underwent diagnostic EBUS-TBNA with a 22-gauge needle to obtain the tissue core. A total of 11 punctures were performed because of insufficient tissue cores. Multiple needle passes would have caused mediastinitis and pericarditis in this patient.

Revised manuscript (CASE PRESENTATION)

A 67-year-old woman was referred to our hospital because of lymph node enlargement on chest computed tomography (CT) (Figure 1). EBUS-TBNA of the right paratracheal lymph node was performed using a 22-gauge needle to obtain the tissue core. A total of 11 punctures were performed due to insufficient tissue cores. Prophylactic antibiotics (amoxicillin/clavulanate) were administered to prevent infectious complications after the procedure. Histological examination of the specimen revealed negative malignant cells and no bacteria. Four days after EBUS-TBNA, the patient presented with a high fever and chest pain. Seven days after EBUS-TBNA, the patient visited the emergency room.

Minor remarks a) Introduction: you cannot use the plural for hilum as it is a Latin word. Please stick with "hilum"

Authors' Response: As commented by the reviewer, we changed the word hilar to hilum.

Revised manuscript (INTRODUCTION)

Endobronchial ultrasound-guided transbronchial needle aspiration (EBUS-TBNA) is used to biopsy enlarged lymph nodes in the mediastinum and hilum to stage patients

with lung cancer and to provide a definitive diagnosis of lymphadenopathy.

b) Physical examination: "...were decreased"

Authors' Response: As commented by the reviewer, we changed the word.

Revised manuscript (CASE PRESENTATION)

On physical examination, the patient appeared acutely ill with a clear mental status. The patient was febrile (37.8 °C) and had a stable blood pressure of 100/68 mmHg, pulse rate of 107 bpm, respiratory rate of 18/min, and body temperature of 37.8 °C. The breath sounds on the left side of the chest were decreased.

c) Discussion: amoxicillin/clavulanate is misspelled, please correct

Authors' Response: As commented by the reviewer, we changed the word.

Revised manuscript (DISCUSSION)

Antibiotic prophylaxis is not used in most EBUS-TBNA cases. However, in this case, mediastinitis and pericarditis occurred even with the use of prophylactic antibiotics. Antibacterial precautions are not recommended for routine diagnostic bronchoscopy, unless there is a previous history of spleen removal, artificial heart valves, or endocarditis[13]. This patient with an enlarged, homogeneous right paratracheal lymph node underwent diagnostic EBUS-TBNA with a 22-gauge needle to obtain the tissue core. A total of 11 punctures were performed because of insufficient tissue cores. Multiple needle passes would have caused mediastinitis and pericarditis in this patient. There are no definitive guidelines regarding which prophylactic antibiotics should be used and for which patients. Despite the use of amoxicillin/clavulanate in this patient, infectious complications occurred; therefore, further research is needed to determine the optimal antibiotic course.

d) Conclusion: please use the past tense

Authors' Response: Thank you for your comments. As commented by the reviewer, we changed discussion to past tense.