Author’s response to reviews

Title: A surgical case of mediastinal hematoma caused by a minor traffic injury

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Author’s response to reviews:

Dr. Vipin Zamvar
Editor-in-Chief
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Ms. No. JCTS-D-19-00019
A surgical case of mediastinal hematoma caused by a minor traffic injury

Dear Dr. Zamvar:

We are most grateful to you and the reviewers for the helpful comments regarding our manuscript entitled “A surgical case of mediastinal hematoma caused by a minor traffic injury.” We would like to resubmit the enclosed revised manuscript to The Journal of Cardiothoracic Surgery. We have corrected our manuscript according to the reviewers’ comments and have responded to the comments as below.

Reviewer #1

Comment 1. The case presentation should be better structured in its timeline (which is somewhat a little confusing)

Answer 1. Thank you for your comment. As the reviewer suggested, we modified the case presentation.

Change 1.
We changed the sentences as follows.

On page 2, lines 24-30, from the original text: “Two days later, --- CT revealed cervical and mediastinal hematomas. It was possible that there was active bleeding from the right inferior thyroid artery. We performed angiography and embolization of the right inferior thyroid artery. However, her condition continued to deteriorate, so we performed emergency surgery to obtain hemostasis and remove the hematoma” to the revised text: “Two days after the accident, the contrast-enhanced CT was repeated, which revealed cervical and mediastinal hematomas. Because it was possible that there was active bleeding from the right inferior thyroid artery, embolization of the right inferior thyroid artery was performed; however, her condition further deteriorated, so we performed emergency surgery to achieve hemostasis and remove the hematoma.”

On page 4, lines 56-57, we changed “After the accident” to “Just after the accident”

On page 4, line 59, we changed “Ten hours later” to “Ten hours after the accident”

Comment 2. The discussion is poor and should be implemented about mediastinal hematoma and traumatic injuries (i.e. mechanism of injury, symptoms presentation, imaging diagnosis and differential diagnosis, management)

Answer 2. We changed and added the below sentences to the Discussion section.

Change 2.

On page 6, lines 96-98, we changed “Thus, we speculated --- due to a minor traffic injury” to “Thus, we speculated --- due to increased venous pressure resulting from the traffic injury.”

On pages 6-7, lines 107-110, we added the following sentence: “Even after a minor traffic injury, patients who complain of a sore throat or chest pain could have mediastinal bleeding. Such patients should be observed to assure that their condition is stable.”

Comment 3. The figures should be better explained using appropriate captions (i.e. the location of the hematoma, the compression on the surrounding tissue).

Answer 3. Thank you for your comment. As the reviewer suggested, we changed the legends.

Change 3.

1) We added arrowheads on the figures.

2) On page 10, line 170-174, we changed the Figure 1 legend, as follows:
(A) From “Cervical hematoma” to “A cervical hematoma in the retropharyngeal space (arrowhead).”

(C) From “Trachea and superior vena cava compression” to “A mediastinal hematoma compressing the trachea, esophagus, and superior vena cava.”

3) On page 11, line 179, we added captions in the Figure 2 legend, as follows:

In Figure 2, H: Head, F: Foot, R: Right, L: Left.

Comment 4. Some minor language corrections are needed.

Answer 4. A native speaker has corrected the grammatical errors.

Reviewer #3

Comment 1. The legend of operative figures is not enough to understand the detail of operative field. Please describe the more detail of operative figures, including the explanations of the anatomy.

Answer 1. Thank you for your comment. We added a new image for Figure 3 (thoracic surgical view) and modified the figure legend. In addition, we added the surgical findings to the text.

Change 1.

1) We added arrowheads to the figures.

2) On page 10, line 170-174, we changed the Figure 1 legend, as follows:

(A) From “Cervical hematoma” to “A cervical hematoma in the retropharyngeal space (arrowhead).”

(C) From “Trachea and superior vena cava compression” to “A mediastinal hematoma compressing the trachea, esophagus, and superior vena cava.”

3) On page 11, line 179, we added captions to the Figure 2 legend, as follows:

In Figure 2, H: Head, F: Foot, R: Right, L: Left.

4) We added Figure 3C.
5) On page 11, line 184-187, we changed the Figure 3 legend, as follows:

(B) The mediastinal pleura was fully opened, and the azygos (arrow) and vagus nerves (arrowhead) were secured.

(C) The hematoma between the pre-vertebral lesion and dorsal aspect of the esophagus was removed. Vagus nerves (arrow), Esophagus (arrowhead).

5) On page 5, lines 78-81, we added the following sentences: “The mediastinal pleura was fully opened, and the azygos and vagus nerves were secured. The hematoma between the pre-vertebral lesion and the dorsal aspect of the esophagus was removed.”

Comment 2. Thoracoscopic surgery is also a useful operative procedure to removal of mediastinal hematoma. Did the authors consider the thoracoscopic surgery to remove the mediastinal hematoma?

Answer 2. We initially used a thoracoscopic approach, but the surgical view was obscured by a massive hematoma and incomplete deflation of the right lung due to dislocation of the endotracheal tube. Thus, we converted to a posterolateral thoracotomy approach.

Other changes

On page 6, line 22 and 55, we changed patient age from “44-year-old woman” to “A woman in her forties.”

We appreciate these thoughtful comments and hope that our manuscript is now suitable for publication in The Journal of Cardiothoracic Surgery. We look forward to a favorable reply. All related correspondence should be sent to Satoshi Shiono, M.D., Ph.D. at the address below.

Very respectfully yours,

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