

Format for ANSWERING REVIEWERS

August 25, 2012

Dear Editor:



Please find enclosed the edited manuscript in Word format (file name: 10859-review.doc).

Title: Spontaneous pneumomediastinum and Macklin effect: Overview and appearance on CT

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Name of Journal: *World Journal of Radiology*

ESPS Manuscript NO:10859

The manuscript has been improved in accordance with the reviewers' suggestions, as follows:

1 Format has been updated

2 References and typesetting were corrected

3 Revisions have been made based on the reviewers' suggestions

(1) Comment of Reviewer 00289471

"Anyway the article fails to stress the differences that in clinical practice permit to distinguish among traumatic pneumomediastinum, tracheal or bronchial rupture and barotrauma.

Answer: This article is focused on spontaneous pneumomediastinum, not on all etiologies of pneumomediastinum. I was invited by the editor of WJR to write a review article of the Macklin effect in spontaneous pneumomediastinum, because my article, "Diagnosis and treatment of patients with spontaneous pneumomediastinum. *Respir Investig* 2014; 52: 36-40" has been cited 12 times. Therefore, I do not think that it is necessary to write about differentiating between traumatic pneumomediastinum, tracheal, or bronchial rupture and barotrauma.

(2) Comment of Reviewer 00289471

"There is no mention about the possibility of spreading of air from the mediastinum to the peritoneal space, a finding that can pose some more difficulty in interpretation, especially in emergency setting."

Answer: In cases of spontaneous pneumomediastinum, air spreading from the

mediastinum to the peritoneal space is very rare. However, I did find a few case reports on spontaneous pneumomediastinum and pneumoperitoneum. I added this information to the text along with 2 references.

(3) Comment of Reviewer 00289471

"In the introduction there is a short list of causes of pneumomediastinum and then "...other etiologies". This looks to me too hasty. "

Answer: I changed the sentences as follows and referred to reference #1.

"Pneumomediastinum is the condition of free air within the mediastinum. It can result from a variety of triggers that are either intrathoracic (eg., narrowed or plugged airway, straining against a closed glottis, blunt chest trauma, alveolar rupture) or extrathoracic (eg., sinus fracture, iatrogenic manipulation during tooth extraction, perforation of a hollow viscus) [1]."

(4) Comment of Reviewer 00289471

"It is stated also that air spreads along bronchi and corresponding arteries and veins. Actually bronchi and arteries go together, while veins have a different course. Air should spread along bronchi and arteries and not veins. In the case the authors have evidence of this other pattern of spreading of air they should explicate and demonstrate this fact. "

Answer: I think you are incorrect. Please look at reference #1, which explains that the air of interstitial emphysema spreads along both arteries and veins.

(5) Comment of Reviewer 00289471

"Thought that most of pneumorachis are innocuous it is not clear how has been managed the symptomatic patient and what is the correct management of this kind of patients."

As I have mentioned in the text, a review of the literature revealed that pneumorrhachis is innocuous, but 1 case (reference #31) underwent surgery. I added the information describing this case as follows:

"... a 72-year-old man with progressive motor weakness and sensory deficits in the lower extremities had a large accumulation of intraspinal air, but he recovered completely after a C7 laminectomy."

And, I concluded that section of the paragraph as follows:

"Therefore, in SPM, accumulation of air within the spinal canal is **mostly** self-limiting and benign. "

(6) Comment of Reviewer 00289471

"I don't barium should be used in the context of a pneumomediastinum of doubtful nature."

Answer: I found it difficult to revise my manuscript with respect to this comment.

(7) Comment of Reviewer 02348457

"Authors mainly described spontaneous pneumomediastinum, rather than how to detect machlin effect on SPM using CT. The title should be changed."

Answer: I added a new title: "Spontaneous pneumomediastinum and Macklin effect: Overview and appearance on CT" instead of the previous title "CT demonstration of the Macklin effect in spontaneous pneumomediastinum: A literature review."

(8) Comment of Reviewer 02348457

"The order of contents of this review could be rearranged, for example, the main causes of SPM, CT detection of SPM, Complications of SPM. The pediatric SPM can be integrated into the main causes of SPM."

I changed the order of contents in accordance with the reviewer's comment.

(9) Comment of Reviewer 02348457

"Figure 1 and 3 are of poor quality. There is a redundant arrow around the spine."

I added Figures of appropriate quality and changed the arrow.

Thank you again for publishing our manuscript in the *World Journal of Radiology*.

Sincerely yours,

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