

August 31, 2013

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: ESPS manuscript 4272-Review.doc).

Title: Iatrogenic Pneumothorax Related to Mechanical Ventilation

Author: Chien-Wei Hsu, Shu-Fen Sun

Name of Journal: *World Journal of Critical Care Medicine*

ESPS Manuscript NO: 4272

The manuscript has been revised according to the suggestions of reviewers:

1 Format has been updated

We had added the section of "core tip" in page 3.

2 Revision has been made according to the suggestions of the reviewer

(1) Reviewer 1 comment

Major points This manuscript was described regarding the pneumothorax related to mechanical ventilation. In the pulmonary barotraumas during mechanical ventilation, the mortality rate is high and the prompt diagnosis and treatment are required. In this manuscript core tip, the author described that "We should early diagnose pneumothorax and manage pneumothorax to reduce mortality and morbidity in the mechanical ventilated patients." However, the strategy for this did not demonstrate sufficiently. There are big problems about this manuscript. First, this manuscript was uneasy to read because there was no table. The author should organize the manuscript easy to read. Second, the contents in this manuscript were similar to the recent paper titled "Pulmonary barotrauma during mechanical ventilation" (see UpToDate www.uptodate.com authored by Robert C Hyzy). Minor points There are so many repeat sentences in this manuscript.

Answer:

1. This manuscript describes the clinical characteristics and manifestations of pneumothorax related to mechanical ventilation in order to remind the readers how to identify and diagnose these patients. If clinicians can be aware of pneumothorax earlier and manage it, they can reduce morbidity or mortality of patients. Besides, we added figure 3 to demonstrate the strategy of managing iatrogenic pneumothorax related to mechanical ventilation.
2. We had added table 1, 2 to make the manuscript easier to read.
3. There are a lot of differences between our manuscript and the recent paper titled " Pulmonary barotraumas during mechanical ventilation". We described some new findings that previous literatures have not ever mentioned. For example, the outcomes of pneumothorax related to mechanical ventilation (page 11) are associated with PaO₂/FiO₂< 200mmHg, APACHE II score and tension pneumothorax.
4. We deleted repeated sentences in this manuscript to make it easier to read.

(2) Reviewer 2 comment:

This is a well written manuscript. In my opinion, this is an important topic to cover in the form of a review article. The authors describe our current understanding of iatrogenic pneumothorax related to mechanical ventilation. The authors describe epidemiology of pneumothorax associated with mechanical ventilation. In addition, the authors discussed postulated underlying pathophysiology and conditions that may predispose to pneumothorax during mechanical ventilation. I was very impressed with the section on investigations of pneumothorax and the inclusion of I would suggest that the

authors strengthen to important message of the use of computed tomography as chest radiograph may not necessary distinguish between emphysematous bullae and pneumothorax. Hence insertion of intercostal chest drain into emphysematous bullae in patient who is mechanically ventilated may lead to catastrophic consequences. In addition, the section describing the use of transthoracic ultrasound would benefit from adding of the description of findings on M-mode in normal and in cases of pneumothorax. Overall this is an interesting review which describes in a novel way aspects of pneumothorax related to mechanical ventilation.

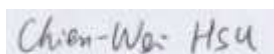
Answer:

We had added the following sentences "Chest radiograph may not distinguish between emphysematous bullae and pneumothorax, hence insertion of intercostals chest drain into emphysematous bullae in patients who are mechanically ventilated may lead to catastrophic consequences" (page 9) and description of ultrasonographic findings on M-mode in normal and in cases of pneumothorax (page 9, 10).

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Critical Care Medicine*.

Sincerely yours,

A handwritten signature in blue ink that reads "Chien-Wei Hsu". The signature is written in a cursive, slightly slanted style.

Chien-Wei Hsu, MD

ICU, Department of Medicine, Kaohsiung Veterans General Hospital

386, Ta-Chung 1st Road, Kaohsiung 813, Taiwan

Fax: +886-7-3420243

E-mail: cwhsu2003@yahoo.com