

## Review Form 1.6

Journal Name:	<a href="#">Asian Journal of Research in Surgery</a>
Manuscript Number:	Ms_AJRS_83121
Title of the Manuscript:	The relationship of pneumothorax with acute respiratory distress syndrome and mortality in Covid 19
Type of the Article	Original Research Article

### General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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### PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Compulsory</b> REVISION comments	<p>Dear Editor: Thank you for sending me this article for reviewing. My remarks:</p> <ol style="list-style-type: none"><li>1- First, I want to congratulate the authors of this paper. It is an exciting point-of-view to try to correlate pneumothorax, ARDS, and mortality of COVID 19.</li><li>2- I will start with your Introduction, where you wrote that the degree of collapse determines the clinic of pneumothorax. I believe that you forgot the status of the underlying lung, which is more critical than the amount of pneumothorax itself. For example, a COPD patient could present respiratory insufficiency with only 10-15% pneumothorax and necessitate surgical intervention.</li><li>3- The actual correlation between pneumothorax, ARDS, and mortality of COVID 19 is weak. It is almost impossible to correlate pneumothorax and mortality because pneumothorax was more frequent in patients with involvement of the lung's five lobes or patients with more aggressive disease.</li><li>4- What was the cause of the death? Total lung involvement or pneumothorax? What was the cause of pneumothorax? More aggressive disease or more aggressive ventilation regimen?</li><li>5- I understand that COPD and ARDS grades are potential causes of pneumothorax, but it is difficult to correlate it with arterial hypertension.</li><li>6- I didn't understand the p-value and Odds Ratio calculation for gender and ages; it is unnecessary except for the item mortality.</li><li>7- Your conclusions are unclear: COVID 19 is more common in males? Or was it only in your group of patients?</li><li>8- Again, how to correlate hypertension and pneumothorax? For me, it appears to be only a coincidence.</li></ol> <p><b>Conclusion:</b> Pneumothorax in this specific ICU-ventilated setting of patients is always a surgical disease, and it is challenging to correlate pneumothorax and mortality with such a small number of cases.</p>	<ol style="list-style-type: none"><li>1. Thank you very much for your evaluations and valuable suggestions.</li><li>2. Comorbidities, especially COPD, increase the risk of pneumothorax. It is mentioned superficially in the article. COPD is detailed with your suggestion.</li><li>3. I completely agree with your assessment. Pneumothorax is expected more frequently in ARDS and five lobe involvement. However, interestingly, pneumothorax was detected even in the patient with mild ARDS and/or single lobe involvement. For this reason, it was emphasized that pneumothorax was associated as an independent variable, not a dependent variable.</li><li>4. The causes of death were ARDS due to Covid 19 at rates of up to 90%. Pneumothorax was not a direct cause of death in any patient. However, patients with pneumothorax as an independent variable were statistically correlated with mortality.</li><li>5. Of course I totally agree. In any case, hypertension cannot be associated with pneumothorax. However, although hypertension and pneumothorax are independent variables separately, the frequency and statistical significance of pneumothorax in patients with hypertension was emphasized.</li><li>6. The reason for specifying the p value for gender and age; Although it was more common in one gender, it was statistically insignificant. The p-value was indicated for the relationship between mortality and age. Because pneumothorax was statistically significant at 18-40 years of age, and mortality was statistically significant over 60 years of ages.</li><li>7. Results were more common in males than in our study. It supported many studies that reported that Covid 19 is more often in males.</li><li>8. Pneumothorax and hypertension were statistically significant separately as independent variables. It was emphasized that pneumothorax was more common in patients with hypertension.</li></ol> <p>* Increasing the number of samples can of course give better results. However, this is the number of patients for whom we have permission to study (1 year retrospective) for the period of obtaining official permission with ethical approval. According to the power analysis, this number was considered sufficient for statistical significance and adequacy.</p>
<b>Minor</b> REVISION comments	None	
<b>Optional/General</b> comments	The English need a serious revision.	Checked and revised by Professional Translator.

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PART 2:

	Reviewer’s comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	No