

Should we Reconsider Published Studies During the Early Phase of the COVID Pandemic?

Mohamed Fayed¹ and Wissam Maroun¹

¹Affiliation not available

February 13, 2023

We have read the article entitled "Prone Positioning in intubated and mechanically ventilated patients with SARS-CoV-2" by Chen et al., published in the *Journal of Clinical Anesthesia* (2021 August) (Chen et al., 2021)[1]. We congratulate the authors for this successful publication and make some contributions.

In the article, it has been mentioned in the conclusion that a prolonged prone position is a safe and feasible option to extend survival in patients with COVID-19. It was reported that among the patients that died within 14 days of intensive care admission, 11.8% received prolonged prone positioning, while 52.2% did not. The authors mentioned some study limitations, but it is incomplete.

We have the following concerns regarding the methodology of the study. The authors clearly stated that patients who did not tolerate prolonged prone positioning were excluded from the study. The author should have mentioned how many patients were excluded, which could have affected the sample size distribution. Also, what was the definition of a prolonged prone position? What was the definition of intolerance to the prolonged prone position? Is it worsening oxygenation, hemodynamic stability, or other criteria? If exclusion were based on worsening oxygenation, hence prone position would have affected the outcomes and mortality. The authors did not mention if the patients excluded had an absolute or a relative contraindication to prone positioning. There are various terms used for proning in the study, prolonged proning, long-term proning, and persistent proning.

During the early phase of the COVID-19 pandemic, with limited evidence of this novel disease. Many journals accepted borderline publications. Some journals didn't pay attention to major methodological concerns in published articles. We addressed our concerns in the published article addressing a similar topic (Fayed & Maroun, 2022). Our published meta-analysis on this topic showed no mortality benefit of prone ventilation. The study, as mentioned earlier by Chen et al., results were skewed compared to other published ones (Fayed et al., 2022).

In conclusion, the excluded patients might have worse outcomes in the prone position. Hence, excluding these patients from the study might show results favoring the prone position, and hence there are favorable outcomes in the prone position. This should have been mentioned as a significant limitation of this study, and the conclusion should be cautiously drawn and rephrased.

References

- Prone positioning in intubated and mechanically ventilated patients with SARS-CoV-2. (2021). *Journal of Clinical Anesthesia*, 71, 110258. <https://doi.org/10.1016/j.jclinane.2021.110258>
- Prone Versus Supine Ventilation and Mortality Outcome in Intubated COVID-19 Patients a Revision Letter. (2022). *Journal of Intensive Care Medicine*, 38(3), 321–321. <https://doi.org/10.1177/>

08850666221147229

954: PRONE VENTILATION IN INTUBATED COVID-19 PATIENTS: SYSTEMATIC REVIEW AND META-ANALYSIS. (2022). *Critical Care Medicine*, 51(1), 470–470. <https://doi.org/10.1097/01.ccm.0000909544.54572.65>