# Peer Review File

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## Reviewer A Comments

In this study the authors describe the case report of an obese male presenting with rhabdomyolysis secondary to COVID-19. This case study adds to the several others presenting with COVID-19 and rhabdomyolysis, and to a better understanding of this phenomena. I have just a few comments.

**Comment 1:** I find the wording of the first key finding speculative. To suggest rhabdomyolysis induced AKI happened because of COVID-19 does not seem to fit the data or literature. As mentioned in the abstract and last 'implication', the most that might be said is 'incidental to'. Line 152-153 also makes this point.
**Reply:** Thank you for this comment, we have changed the wording to reflect your point made.
**Changes in the text:** Please see changes in text in highlights box on line 53

**Comment 2:** Line 59-60 again, rhabdo 'caused' by COVID is a still not proven etiology. Many of the case studies prior to this presented with other complicating factors, including a history of rhabdomyolysis. Here, the extreme obesity could also have contributed.
**Reply:** Thank you for your comment. We have changed the wording of this sentence to reflect your point.
**Changes in the text:** Please see line 65-66 for revision of the text.

**Comment 3:** Line 74 – can it be confirmed there was no falls in the patient's recent history?
**Reply:** There was no history of falls from the patient. We have added in the report to confirm this.
**Changes in the text:** Please see revision to line 86

**Comment 4:** The levels of creatine kinase are remarkable. Could the authors verify if any of the CK values were duplicated? i.e. not a measurement error?
**Reply:** CK sample was taken twice on day one of admission to ITU at 5am and repeated at 11:45am. Both results were >426700.
**Changes in the text:** Please see additional line 102 in report confirming this to the reader.

**Comment 5:** Line 111 – Here it's indicated the patient received intubation and mechanical ventilation. This brings in question earlier statements of 'without features of respiratory compromise', including in the abstract.
**Reply:** Where we have written on line 32 'without features of severe respiratory compromise' we are talking in general terms, not referring to our patient specifically. We note your comment and that this may be confusing so have changed the wording slightly.
**Changes to the text:** We have changed this to without features of pulmonary involvement on line

32 to avoid confusion.

**Comment 6:** Line 130 – I again find 'rhabdo caused by COVID' to extend beyond known etiology. Certainly, this adds to a growing list of rhabdo/COVID cases, but that is not causation, 'presented with' seems more accurate. This is true about 'COVID induced rhabdo' used later in the manuscript. The authors point this out in Line 152-153, so wording should be consistent.
**Reply:** We have noted your comment and made changes.
**Changes to the text:** please see changes to line 139

**Comment 7:** Indeed, it is often referred to CK developing AKI, however, might it also be possible that AKI leads to elevated CK. Without a justified incidence of muscle damage (blunt trauma, falls, exertional), yet presenting with 'urine output had decreased significantly and had become concentrated' (L69-70) in the previous 5 days, perhaps the patient had COVID related AKI, resulting in elevated CK.
**Reply:** Thank you for your comments. AKI leading to elevated CK is of course very unusual. We have modified the wording to include suspected, so we are not generalising.
**Changes to the text:** We have changed the wording in the abstract line 35 and introduction line 60 to include suspected.

**Comment 8:** Line 187 – Again careful use of words implying causation should be considered in the over read conclusion.
**Reply:** Thank you for your comment.
**Changes to the text:** We have changed COVID-19 induced to COVID-19 associated throughout the text.

Below are some minor points:
• Line 91 – add comma to 202921.
**Reply:** Added, thank you.

• Line 108 - and elsewhere add space between # and units.
**Reply:** Changed, thank you.

### Reviewer B Comments

I extend my sincere appreciation for your invaluable contribution in presenting this exceptional manuscript that significantly adds to the existing body of literature, elucidating some of the less common yet profoundly impactful consequences of COVID-19 infection. I would like to offer a few constructive suggestions for your consideration:

**Comment 1:** On page 3, lines 70-71, in addition to addressing the left leg pain, kindly provide clarification regarding any history of malagia to enhance the comprehensiveness of the information.
**Reply:** There was no other history of myalgia on direct questioning. Left leg pain was associated

with the cellulitic area on the anterior aspect of his leg.
**Changes in text:** Addition of 'There was no history of myalgia' to Page 3, line 78.

**Comment 2:** It would be beneficial to include page numbers throughout the manuscript to facilitate ease of reference for reviewers.
**Reply:** Thank you for this comment, I have now added page numbers.

**Comment 3:** On page 4, line 77, I recommend revising the text from "or pets" to "or exposure to pets" for greater clarity.
**Reply:** Thank you, I have made this change.
**Changes in text:** Please see page 4, line 85.

**Comment 4:** Further, on page 4, lines 80-81, please consider elaborating on the specific symptoms experienced by the patient in their two prior COVID-19 infections to enhance the reader's understanding.
**Reply:** When I discussed with the patient, he reported symptoms similar to cold and flu on both occasions that he recovered from following roughly 1 week following initial onset.
**Changes in text:** Changes made to line 89-90 to reflect this.

**Comment 5:** I encourage you to emphasize the high mortality rate of COVID-19, particularly in the context of rhabdomyolysis, by prominently featuring this information in a highlight box. This key message will serve to increase awareness among readers.
**Reply:** Thank you for this comment, we have added this to the highlight box.
**Changes in text:** Please see line 53, addition made to highlight box.

**Comment 6:** On page 6, lines 181-184, it would be beneficial to mention that pulmonary embolism (PE) can be a complication of continuous venovenous hemofiltration (CVVH), given that the patient underwent this treatment.
**Reply:** Thank you for this input. We note that most instances of PE are more common on patients on long-term haemodyalysis which our patient was not. However, we agree this is important to include.
**Changes to text:** Please see page 6 line 194 for modification and addition of new reference.

Your diligent consideration of these recommendations will undoubtedly enhance the clarity and impact of your manuscript, contributing to its overall excellence.
Thank you once again for your dedication to advancing our understanding of the multifaceted aspects of COVID-19.