

PEER-REVIEW REPORT

Name of journal: World Journal of Clinical Cases

Manuscript NO: 70830

Manuscript type: Case control study

Title: Methylprednisolone accelerate chest CT absorption in COVID-19: a three-centered retrospective case control study from China

Reviewer: Guillermo Arturo Valencia M.D. (Country: Peru)

Reviewer's Code: 05432812

SPECIFIC COMMENTS TO AUTHORS

This interesting case control study “Methylprednisolone accelerate chest CT absorption in COVID-19: a three-centered retrospective case control study from China” analyzed the use of low-to-moderate doses of corticosteroids (methylprednisolone) compared with arbidol in Chinese patients with COVID-19 pneumonia in Wuhan. The primary endpoint is to evaluate the absorption of pulmonary lesions, including possible biomarkers. I consider that this manuscript is publishable in the World Journal of Clinical Cases due to current situation of COVID-19 pandemic, including new variants and the urgent necessity of effective drugs.

I have many suggestions/recommendations in order to improve the manuscript. **We have responded each of the questions raised in the peer-reviewed report and highlight in red.**

1. Section “Aim”

“To investigate the efficacy and safety of **low-to-moderate** dose short-term methylprednisolone for COVID-19 patients”

Please define here the ranges of low-to-moderate dose of methylprednisolone.

Answer: 30 to 40 mg/day

2. Section "Conclusion" (page 2)

"Low-to-moderate dose short-term methylprednisolone can accelerate the chest CT imaging absorption of COVID-19 and is effective safe in clinical use"
What is the goal of a quick/rapid imaging absorption, considering it is just a radiologic result? Is to avoid severe COVID-19 phases? Delay the inflammatory phase? Reduce the hospital stay? Please explain it in introduction section and discussion.

Answer: Low-to-moderate dose short-term methylprednisolone can accelerate the chest CT imaging absorption of COVID-19 so as to improve symptoms and alleviate the condition in a short term,reduce the hospital stay,meanwhile avoid severe COVID-19 phases. The protocol has been proven to be effective and safe in clinical use.

3. Section "Introduction"

"As an emerging severe infectious respiratory disease..."

Put the date of emerging outbreak (since December 31th, 2019 in Wuhan - China)

Answer: This sentence is a reference from literature, expressing that COVID-19 is a new emerging severe infectious respiratory disease, regardless of the date of emerging outbreak (since December 31th, 2019 in Wuhan - China). Therefore, it has not been modified according to the opinions of reviewer.

"...has caused a worldwide outbreak..."

...has caused a pandemic...

Answer:Modified.

4. Section "Therapy and groups"

"...were treated with methylprednisolone (orally or intravenously) ..."

Please specify the dose for PO and IV administration

Answer: The initial dose for PO and IV ranges from 24 to 80 mg per day has been mentioned in Section "RESULT"(3.2Use of methylprednisolone).

"...which was classified as four situations: no absorption, slightly absorption, obvious absorption and progression"

I suggest: show these definitions in a table (appendix)

Answer:Modified in Table 4.

5. Section "Discussion", first paragraph

"...SARS-CoV-2 that has caused worldwide outbreaks."

...that was declared a pandemic by WHO...

Answer:Modified.

"SARS-CoV-2 is characterized by strong infectivity..."

I suggest to add: "...including new variants"

Answer:Modified.

6. Section "Discussion", fourth paragraph

"In our study, we also observed that arbidol had a certain curative effect in treating COVID-19"

This sentence is not clear. I recommend delete it.

Answer:Modified.

7. Section "Conclusion", first and second paragraph

First and second paragraphs should be deleted. There are too lengthy.

Please just show results of your study instead of consensus statements.

Answer:Modified.

8. Section "Conclusion", third paragraph

What is the goal of obtain rapid absorption? Avoid severe/inflammatory phases? Please explain this issue in introduction and discussion section.

Answer:COVID-19 has caused a lot of morbidity and mortality worldwide, occupying more medical resources.Low-to-moderate dose short-term methylprednisolone can rapidly improve symptoms, oxygenation and pulmonary function, alleviate the patients' condition in a short term, reduce the

hospital stay, avoid severe COVID-19 phases and save medical resources ultimately.