

PEER-REVIEW REPORT

Name of journal: *World Journal of Clinical Cases*

Manuscript NO: 75182

Title: Hyperglycemia in COVID-19 infection without diabetes mellitus: Association with inflammatory markers

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 05562720

Position: Associate Editor

Academic degree: MD, PhD

Professional title: Assistant Professor

Reviewer's Country/Territory: Mexico

Author's Country/Territory: United States

Manuscript submission date: 2022-10-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-10-30 18:28

Reviewer performed review: 2022-11-10 18:40

Review time: 11 Days

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input checked="" type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Peer-reviewer statements	Peer-Review: [<input checked="" type="radio"/>] Anonymous [<input type="radio"/>] Onymous
	Conflicts-of-Interest: [<input type="radio"/>] Yes [<input checked="" type="radio"/>] No

SPECIFIC COMMENTS TO AUTHORS

The manuscript entitled “Hyperglycemia in COVID-19 infection without diabetes mellitus: Association with inflammatory markers (An association of Hyperglycemia with inflammatory markers in COVID-19 patients without diabetes mellitus.)” by Harinivaas Shanmugavel Geetha et al. aims at assessing the validity of the cytokine-induced hyperglycemia hypothesis by evaluating the association between inflammatory markers and new onset hyperglycemia in non-diabetic patients with Covid-19 infection. The manuscript is well written, however, there are several concerns that need to be addressed.

1. The manuscript concludes that there is no association between inflammatory marker levels and new-onset Hyperglycemia in non-diabetic patients with Covid-19 infection. Based on this conclusion the authors make the following statement, “thus questioning the validity of the Covid-19 cytokine storm-induced stress hyperglycemia hypothesis”. While their study was focused on assessing inflammatory markers, those are not really the ideal components to assess the cytokine storm that patients with COVID-19 develop, but rather actual inflammatory cytokines such as IL-6, IL-1b, IL-8 etc. etc., thus the authors cannot really question the validity of the Covid-19 cytokine storm-induced stress hyperglycemia hypothesis, unless they perform measurements of an structured inflammatory panel including some of the above mentioned cytokines and demonstrate that they find no correlation at all. Thus, I suggest that the authors remove every statement related to this from the manuscript or reword it based on their findings.
2. Having said that, the aim of the study should be completely reworded.
3. The discussion of the manuscript does not provide a discussion of the author’s findings, but rather provides a literature review of several theory mechanisms

of hyperglycemia induced by COVID-19 among others. The discussion should focus strictly on discussing every of their findings in relation to what is already published, and possible reasoning of discrepancies found. I did not see any discussion related to the markers the authors used for instance, nor any discussion of their results in relation to the outcomes found in these patients.

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Title: Hyperglycemia in COVID-19 infection without diabetes mellitus: Association with inflammatory markers

Provenance and peer review: Invited Manuscript; Externally peer reviewed

Peer-review model: Single blind

Reviewer's code: 06077514

Position: Peer Reviewer

Academic degree: PhD

Professional title: N/A

Reviewer's Country/Territory: China

Author's Country/Territory: United States

Manuscript submission date: 2022-10-30

Reviewer chosen by: AI Technique

Reviewer accepted review: 2022-11-11 05:47

Reviewer performed review: 2022-11-21 03:55

Review time: 9 Days and 22 Hours

Scientific quality	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input checked="" type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
Language quality	<input type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input checked="" type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
Conclusion	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection
Re-review	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Peer-reviewer statements	Peer-Review: [<input checked="" type="radio"/>] Anonymous [<input type="radio"/>] Onymous
	Conflicts-of-Interest: [<input type="radio"/>] Yes [<input checked="" type="radio"/>] No

SPECIFIC COMMENTS TO AUTHORS

Q1 Please indicate the p-value with "=" "<" or ">" in the results section. Q2. The objective is not very clear; I suggested rewriting it. Q3. Explain more extension on the results "Additional analysis showed significantly higher mortality (24.2%vs.9.1%, p-0.001; OR-2.528, p-0.024)". Q4. Suggested finding more correlation between 1) Hyperglycemia and COVID-19 infection and 2) COVID-19 infection and association with inflammatory markers. Q5. For the binary logistic regression analysis to predict Hyperglycemia, there was no difference in LDH levels between the two groups (OR-1.623,p-0.256); any more remarkable discovery from the two groups. If yes, please explain in the study -results section. Q6. Suggested adding the section on future implications and the limitation.