Name of journal: World Journal of Critical Care Medicine

Manuscript NO: 67689

Title: Point of Care Venous Doppler Ultrasound: Exploring the Missing Piece of Bedside Hemodynamic Assessment

Reviewer’s code: 05648950

Position: Peer Reviewer

Academic degree: PhD

Professional title: Chief Doctor, Professor

Reviewer’s Country/Territory: China

Author’s Country/Territory: United States

Manuscript submission date: 2021-04-29

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-05-06 09:58

Reviewer performed review: 2021-05-19 10:23

Review time: 13 Days

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<th>[Y] Grade A: Excellent [ ] Grade B: Very good [ ] Grade C: Good [ ] Grade D: Fair [ ] Grade E: Do not publish</th>
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<td>Language quality</td>
<td>[Y] Grade A: Priority publishing [ ] Grade B: Minor language polishing [ ] Grade C: A great deal of language polishing [ ] Grade D: Rejection</td>
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<td>Conclusion</td>
<td>[ ] Accept (High priority) [ ] Accept (General priority) [Y] Minor revision [ ] Major revision [ ] Rejection</td>
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<td>Peer-Review: [Y] Anonymous [ ] Onymous Conflicts-of-Interest: [ ] Yes [Y] No</td>
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SPECIFIC COMMENTS TO AUTHORS

1. What is the meaning of over jealous volume removal? Could you explain or clarify?

2. It was stated that in cardiac surgery patients, altered intra-renal Doppler pattern was shown to be a strong predictor of AKI. However, this was not replicated in less selected populations of critically ill patients, can you further explain the reason for this findings.

3. It was stated that Doppler Evaluation of venous congestion can point to renal congestion as the cause of renal hypoperfusion, could you give detail information and explanation on this statement?

4. Also, I suggest superior venacava assessment of congestion could be included in this review.
Name of journal: World Journal of Critical Care Medicine

Manuscript NO: 67689

Title: Point of Care Venous Doppler Ultrasound: Exploring the Missing Piece of Bedside Hemodynamic Assessment

Reviewer’s code: 05759634

Position: Peer Reviewer

Academic degree: MD

Professional title: Doctor, Research Fellow

Reviewer’s Country/Territory: Italy

Author’s Country/Territory: United States

Manuscript submission date: 2021-04-29

Reviewer chosen by: AI Technique

Reviewer accepted review: 2021-05-06 05:38

Reviewer performed review: 2021-05-27 02:18

Review time: 20 Days and 20 Hours

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SPECIFIC COMMENTS TO AUTHORS

I am grateful for the opportunity to review this interesting manuscript about the Doppler ultrasonography applications for the evaluation of venous congestion in the bedside context. The paper is well-written, the topic is of clinical interest and good figures are included. I only suggest the following minor revisions:

- In the “Normal Venous Doppler flow patterns” paragraph a better description of the venous waveform morphology is needed; in particular, authors should report the three main venous flow patterns: respirophasic, continuous and pulsatile.
- As for central veins, the authors reported only inferior vena cava evaluation; in this regard, I suggest including internal jugular assessment for the hemodynamic status of congestive patients.
- I really appreciate the description of the “pulsatility fraction” as a quantitative marker of portal vein Doppler alterations, so I suggest including the “venous impedance index” for the assessment of Doppler renal venous flow.
- I recommend including a table depicting the advantages and limitations of the different sonographic venous flow patterns depending on the different sites you described in the manuscript.