

# Review of: "Fluids, Vasopressors and Inotropes to Restore Heart-Vessels Coupling in Sepsis: Treatment Options and Perspectives"

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Potential competing interests: No potential competing interests to declare.

In my opinion, the manuscript is interesting but can be substantially improved.

Basically, the paper describes the treatment of a couple of patients whose underlying sepsis-associated cardiovascular conditions required different interventions that were subsequently modified according to the evolving clinical pictures. The authors comment on the initial and follow-up choices, quoting also the clinical studies supporting their decisions.

On the above-described basis, I have some remarks to suggest:

1. The English language must be revised, and some spelling errors must be corrected (i.e., heat instead of heart in the title of case 2).
2. The delta CO<sub>2</sub> is an interesting albeit underused monitoring tool that can be suited also in the ED: I suggest reading and quoting a recent paper by Tombolini et al. on this issue.
3. The risk of excessive fluid administration (i.e., lung and tissue edema) should be more stressed. Put in other words, not all fluid-responsive patients need to be inundated...
4. A few words on the increased vascular permeability leading to what has been exposed in point 3 are required, also taking into account that some of them (i.e., the vascular leak index published by Chandra et al. in 2022 in Critical Care) do not require sophisticated imaging devices and can be measured easily in the ED.
5. The use of norepinephrine-sparing agents other than vasopressin should be discussed (i.e., methylene blue, synthetic VP agonists, etc.).
6. The choice of fluids (NS vs. balanced solutions vs. colloids) should be discussed, and the different pros and cons of each one should be described.