LETTER TO THE EDITOR

Author Response: Insights into Immunomodulatory Therapy for Sepsis

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Dear Editor,

We thank Jindal et al. for their interest in our article published in this journal.[1,2] Our response to the point raised is as under.

We included patients who needed vasopressor support inspite of adequate fluid resuscitation and maintaining a mean arterial pressure (MAP) of >65 mm Hg, hence only a restrictive stable cohort of patients was being studied is factually incorrect. All our patients in both case and control groups were on vasopressor support and had been included as the requisite MAP was maintained. If the results were reviewed, it would be pertinent to note that at both 72 h and 7 days patients who received the polymyxin hemoperfusion therapy in addition to standard of care had improvement of vasopressor dependent index as compared to the controls (Tables 2 and 3). As septic shock patients were equally distributed in both groups, it can be extrapolated to any real-life scenarios in an ICU setting.

Further none of our patients were on any kind of immunosuppressive or immune adjuvant therapy hence no such confounders were there.

Patients with known hypersensitivity to polymixin were excluded. Few patients among the 25 who received the hemoperfusion developed hypotension with no major adverse event. Death occurred in both groups and there was no causal relation with the procedure. Minor adverse events like bleeding and filter clotting happened in insignificant numbers.

Polymyxin hemoperfusion therapy is a costly therapy in resource-poor settings, but longer ICU stay, vasopressor and ventilatory support, continuous renal replacement therapy (CRRT) support need for newer parenteral antibiotics, antifungals, etc. are also a considerable cost to the patient[3–5] hence, if the therapy reduces ICU stay will be beneficial though we have not done a cost-benefit analysis. The objective of this study was to assess the efficacy which has been shown in reducing vasopressor requirement and improving renal functions. Though mortality benefit could not be demonstrated we feel a larger sample size would be able to answer this.

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References

1. Jindal A, Angadi VM, Pratyusha K. IJCCM_24_881_R1. Critical insights into novel immunomodulatory therapy for sepsis: Evaluating promise amidst limitations.
2. Ghosh I, Sangha S, Pandey G, Srivastava A. Efficacy of polymyxin B hemoperfusion for treatment of Sepsis. Indian J Crit Care Med 2024;28(10):930–934. DOI: 10.5005/jp-journals-10071-24805.
3. Dasta JF, McLaughlin TP, Mody SH, Piech CT. Daily cost of an intensive care unit day: The contribution of mechanical ventilation. Crit Care Med 2005;33(6):1266–1271. DOI: 10.1097/01.ccm.0000164543.14619.00.
4. Chacko B, Ramakrishnan N, Peter JV. Approach to intensive care costing and provision of cost-effective care. Indian J Crit Care Med 2023;27(12):876–887. DOI: 10.5005/jp-journals-10071-24576.
5. Peter JV, Thomas K, Jeyaseelan L, Yadav B, Sudarsan TI, Christina J, et al. Cost of intensive care in India. Int J Technol Assess Health Care 2016;32(4):241–245. DOI: 10.1017/S0266462316000398.