

## Blocking the stress response to cardiac surgery: Much to be stress'ed about!

Dear Editor,

Fadhlurrahman *et al.*<sup>[1]</sup> outline an encouraging role of pecto-intercostal fascial block (PIFB) in ameliorating the stress response related to open-heart surgery, thereby aiding an improved set of clinical outcomes in their randomized controlled trial (RCT). Meanwhile, the RCT impresses to have featured study objectives pertinent to the conduct of cardiac surgery,<sup>[1]</sup> there remain important aspects mandating deliberation in the corresponding subject.

To begin with, the American Society of Regional Anesthesia and Pain Medicine, European Society of Regional Anaesthesia and Pain Therapy (ASRA-ESRA) Delphi consensus study now recommends that PIFB be better coined as a superficial parasternal intercostal plane (PIP) block in accordance with their anatomically descriptive standardized regional anesthesia nomenclature for academic communication.<sup>[2]</sup> Nonetheless, talking specifically of the index study, Fadhlurrahman *et al.*<sup>[1]</sup> included all the open-heart surgical patients undergoing sternotomy and operated using cardiopulmonary bypass (CPB). Of note, the authors do not accommodate for the prevailing clinical-surgical heterogeneity where they could have at least accounted for the baseline risk profile by including the EuroSCORE (European System for Cardiac Operative Risk Evaluation) of the subjects.<sup>[1,3]</sup> Moreover, with the outcomes such as the duration of post-operative mechanical ventilation under evaluation,<sup>[1]</sup> the aforementioned only becomes more relevant when independent researchers like Bauer *et al.*<sup>[3]</sup> reveal intricate links between the EuroSCORE and the intensive care unit course following cardiac surgery. Even in specific relation

to the peri-operative stress response, the former research group highlights as to how a higher EuroSCORE associates with elevated interleukin-6, that is, the IL-6, levels to subsequently affect the post-cardiac surgical outcomes.<sup>[1,3]</sup> In this regard of an inflammatory research purview, it would also be equally opportune to humbly seek a clarification from Fadhlurrahman *et al.* pertaining to their institutional practices in relation to steroid administration in cardiac surgery on CPB.<sup>[1,4]</sup>

Additionally, the analgesic attributes of the study merit a relook. The RCT discernibly lacks defining the indications of the opioids being used for peri-operative pain relief, which becomes difficult to overlook in a strictly comparative perspective.<sup>[1]</sup> Herein, the procedural intricacies again hold its own peculiar importance given the multi-factorial nature of post-cardiac surgical pain where a superficial PIP block is expected to specifically cater to the median-sternotomy pain and the pain emanating from other potential sources like the subxiphoid drains and/or the chest tubes can certainly not be undermined.<sup>[1,5]</sup> Indeed, a recent research endeavor by Wang *et al.*<sup>[5]</sup> buttresses the proposition by delineating a beneficial impact of combining a rectus sheath block with a superficial PIP block for an effective post-operative pain management in cardiac surgery.

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### Conflicts of interest

There are no conflicts of interest.

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