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LETTER TO THE EDITOR

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ESPB and post cardiac surgery recovery: reading between the lines

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Sir,

We read with avid interest the recent research paper outlining the utility of bilateral erector spinae plane block (ESPB) on recovery following on-pump coronary artery bypass graft (CABG) (Mostafa et al. 2023). We sincerely applaud the authors on conducting research resonating well with the principles of an enhanced recovery after cardiac surgery assisted by opioid-sparing multimodal analgesia (Magoon et al. 2023, Choudhury et al. 2020). Nonetheless, there are important facets of the randomized controlled trial (RCT) warranting clarification.

Firstly, in a RCT exclusively involving on-pump CABG patients, the readers remain "blinded" to the cardiopulmonary bypass (CPB) times in both groups. The former becomes important in the striking absence of the analgesia management protocol during CPB, especially since hemodynamic perturbations employed as surrogate markers of inadequate analgesia in the index RCT are not available on extracorporeal circulation (Magoon et al. 2022). Secondly, with the time to extubation as the primary outcome, it would have been only prudent to have had prespecified an objective and uniform criterion to extubate the postoperative patients (Mostafa et al. 2023). This could have greatly enhanced the lucidity of the findings.

Thirdly, we would also like to share concerns regarding the interrelation between the study objectives wherein the postoperative pain scores were being measured post-extubation in the study with the time to extubation being the primary outcome as discussed above. With ESPB group being extubated "earlier" than the sham block group, this leads to peculiarly "skewed" numeric rating scale (NRS) pain assessment time stamps between the two groups, at least by a margin of the shortened inter-group "time to extubation" observed in the RCT (Mostafa et al. 2023). Fourthly, it is not presented in the article as to which time point was used as the starting reference point for estimating the time to first rescue analgesia and hence becomes difficult for the readers to interpret the parameter. Indeed, the time to first rescue analgesic bolus is best considered from a standard (or, a comparable event between the groups) such as the time of block performance or the time of shifting to the intensive care unit. Last but not the least, albeit assisting a robust blinding and contributing strength to any RCT, the use of "sham" block is not without its' own ethical concerns, particularly in the context of regional analgesic blocks demonstrating potential risks against "nil" therapeutic effects when used as a "sham" (Nair et al. 2020).

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Abbreviations

CABG	Coronary artery bypass graft
CPB	Cardiopulmonary bypass
ESPB	Erector spinae plane block
NRS	Numeric rating scale
RCT	Randomized controlled trial

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None.

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