Letter to the Editor

Comment on: "Comparative study between ultrasound-guided erector spinae plane block and thoracic paravertebral block for postoperative analgesia after video-assisted thoracic surgery"

Divyashree Sathyaprakash, Raghuraman M Sethuraman, Pugazhenthi Maripillai

Department of Anesthesiology, Sree Balaji Medical College and Hospital, BIHER Chennai, India.

ABSTRACT

We read with great interest the recently published article that compared the erector spinae plane block (ESPB) with thoracic paravertebral block (TPVB) for postoperative analgesia after video-assisted thoracic surgery (Sobhy *et al.*, 2023). We wish to add a few discussions on this topic in the form of a "Letter to the Editor" manuscript.

The authors concluded that US-guided ESPB may be regarded as a safe and effective substitute to TPVB owing to its straightforward technique with superficial anatomical landmarks, superior patient satisfaction, and lower time consumption in performing the block. However, while discussing the time for the first postoperative rescue analgesic and the total amount of rescue opioids, they state that there was no statistically significant difference between the two groups. They used the references of Zhao *et al.*, 2020 and Ciftci *et al.*, 2019 (we use the year of EPub of that article i.e 2019 although it was allotted to an issue in 2020 to avoid confusion with another article by the same authors published in the same year) to corroborate their findings, stating that Ciftci *et al.* 2019 noted that there was no discrepancy between the ESPB and TPVB rescue analgesia (meperidine) which was administered to 10 patients in the ESPB group and 12 patients in the TPVB group.

Key Words: Erector spinae plane block, Thoracic paravertebral block, video-assisted thoracoscopic surgery.

Received: 27 November 2023, Accepted: 22 January 2024

Corresponding Author: Raghuraman M Sethuraman, MD, Department of Anesthesiology, Sree Balaji Medical College

and Hospital, BIHER Chennai, India, Tel.: +916379141854, E-mail: drraghuram70@gmail.com.

ISSN: 2090-925X, 2024, Vol.16, No. 1

TO THE EDITOR

We read with great interest the recently published article that compared the erector spinae plane block (ESPB) with thoracic paravertebral block (TPVB) for postoperative analgesia after video-assisted thoracic surgery (Sobhy *et al.*, 2023). We wish to add a few discussions on this topic.

The authors concluded that US-guided ESPB may be regarded as a safe and effective substitute to TPVB owing to its straightforward technique with superficial anatomical landmarks, superior patient satisfaction and lower time consumption in performing the block. However, while discussing the time for first postoperative rescue analgesic and total amount of rescue opioids, they state that there was no statistically significant difference between the two groups. They used the references of Zhao *et al.*, 2020 and Ciftci *et al.*, 2019 (we use the year of EPub of that article i.e 2019 although it was allotted to an issue in 2020 to avoid confusion with another article by the same authors published in the same year) to corroborate their findings, stating that Ciftci *et al.*, 2019 noted that there was no discrepancy between the ESPB and TPVB

rescue analgesia (meperidine) which was administered to 10 patients in the ESPB group and 12 patients in the TPVB group. Also, while concluding that the ESPB group required considerably less time to administer the block $(8.1 \pm 1.7 \text{ min})$ than the TPVB group $(11.35 \pm 1.7 \text{ min})$, they cite the same reference of Ciftci et al., 2019, who noted that the ESPB group's block procedure time $(7.13 \pm 1.59 \text{ min})$ was significantly less than that of the TPVB group $(13 \pm 2.49 \text{ min})$. Here, we wish to highlight that the above statements don't match with the cited study by Ciftci et al. 2019. This particular study analysed the efficacy of ESPB for postoperative analgesia after video assisted thoracoscopic surgery (VATS) using a control group not TPVB as stated by Sobhy et al., 2023. More so, the findings stated are by a different study, also by Ciftci et al., 2020. wherein they compared ESPB and TPVB for postoperative analgesia management following Video-Assisted Thoracic Surgery.

Additionally, while discussing regarding VAS scores at rest and while coughing, the authors have concluded that there was no statistically significant difference between the two groups (p value > 0.05), and cite many references, one of which being Taketa *et al.*, 2019. However, according

DOI: 10.21608/ASJA.2024.251483.1025

to Taketa *et al.*, 2019, the median difference in NRS at rest 24 hours postoperatively was 1 in their study, which failed to demonstrate non-inferiority; they concluded that the analgesic effect of ESPB for VATS was not equivalent compared to TPVB 24 hours postoperatively. This reference hence does not correlate with the statement by Sobhy *et al.*, 2023.

LIST OF ABBREVIATIONS

- Erector spinae plane block (ESPB).
- Thoracic paravertebral block (TPVB).

CONFLICT OF INTEREST

There are no conflicts of interests.

REFERENCES

 Ciftci B, Ekinci M, Celik EC, Tukac IC, Bayrak Y, Atalay YO (2020) Efficacy of an ultrasound-guided erector spinae plane block for postoperative analgesia management after video-assisted thoracic surgery: a prospective randomized study. J Cardiothorac Vasc

- Anesth 34(2):444–449. https://doi.org/10.1053/J. JVCA. 2019. 04. 026.
- 2. Çiftçi B, Ekinci M, Çelik EC, et al. Ultrasound-guided erector spinae plane block and thoracic pa¬ravertebral block for postoperative analgesia mana¬gement following video-assisted thoracic surgery: A prospective, randomized, controlled study. JARSS 2020;28(3):170-8.
- 3. Sobhy, A.A., Sharaf, S.I., Kamaly, A.M. *et al.*, Comparative study between ultrasound-guided erector spinae plane block and thoracic paravertebral block for postoperative analgesia after video-assisted thoracic surgery: an equivalence study. Ain-Shams J Anesthesiol 15, 41 (2023). https://doi.org/10.1186/s42077-023-00339-1.
- Taketa Y, Irisawa Y, Fujitani T (2019) ESRA19-0110 Comparison of ultrasound guided erector spinae plane block and thoracic paravertebral block for postoperative analgesia after video-assisted thoracic surgery: a prospective randomized non-inferiority trial. Reg Anesth Pain Med 44(Suppl1):A129–A129. https:// doi. org/ 10. 1136/ RAPM- 2019- ESRAA BS2019. 170.