Inter-transverse process blocks: caution about difference in methods

TO THE EDITOR: I read with great interest a recently published case report that described three cases wherein a bolus inter-transverse process block (ITPB) plus a continuous erector spinae plane block was provided for pain relief during video-assisted thoracoscopic surgery [1]. I greatly appreciate the authors for their innovative applications and excellent presentations of these cases.

I wish to present my clarifications on the difference between the two blocks, namely the costotransverse foramen block (CTFB) and mid-point transverse process to pleura block (MTPB), that are collectively named “ITPB” as per the recent nomenclature.

Yamamoto et al. [1] provided a CTFB for the first case. I am uncertain whether the description of this technique, as per Fig. 1 of Yamamoto et al. [1], is correct because the needle direction is from caudad to cephalad. This is in contrast to the original description by Nielsen et al. [2], wherein the needle trajectory was from cephalad to caudad, and the needle tip was placed at the neck of the rib attached to the cranial portion of the caudal transverse process for the local anesthetic injection. Furthermore, the needle tip was placed at the midpoint between the transverse process and pleura, as described by Yamamoto et al. [1], which is similar to the MTPB [3]. I believe that this confusion occurred because Yamamoto et al. [1] cited the study by Shibata et al. [4] as a reference for CTFB. Because of this change in the needle direction, it is also uncertain whether the description of the CTFB injection site, as per Fig. 3 of Yamamoto et al. [1], is correct. The CTFB injection site should be over the neck of the rib attached to the caudal transverse process, in accordance with the original description by Nielsen et al. [2], and not closer to the cranial transverse process. The site of the MTPB injection was described correctly in Fig. 3, although the ultrasound image describing the method of MTPB for cases 2 or 3, was not provided [1].

To conclude, many interfascial plane blocks have been described in the recent literature, and some of these, such as CTFB and MTPB, are in close proximity. Hence, we must carefully analyze each technique based on appropriate reference(s) to avoid confusion among the different techniques. A recently published article on the nomenclature of various regional techniques [5] will also help greatly in this regard. Nevertheless, a strong consensus on the nomenclature for ITPBs and a clear description of the CTFB technique is needed.

Raghuraman M Sethuraman, M.D.
Department of Anesthesiology, Sree Balaji Medical College & Hospital, Chennai, India

Corresponding author: Raghuraman M Sethuraman
Department of Anesthesiology, Sree Balaji Medical College & Hospital, #7, Works Road, Chennai 600044, India
Tel: 91-44-42911000, Fax: 91-44-22412018, E-mail: drraghuram70@gmail.com

Received: April 19, 2023; Revised: May 16, 2023; Accepted: May 17, 2023

FUNDING
None.

CONFLICTS OF INTEREST
Raghuraman M Sethuraman is the current editor of Anesthesia and Pain Medicine. However, he was not involved in the peer reviewer selection, evaluation, or decision process of this article.

ORCID
Raghuraman M Sethuraman, https://orcid.org/0000-0001-8464-7458

REFERENCES
2. Nielsen MV, Moriggl B, Hoermann R, Nielsen TD, Bendtsen TF, Berglum J. Are single-injection erector spinae plane block and multiple-injection costotransverse block equivalent to thoracic

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/4.0) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.
Copyright © the Korean Society of Anesthesiologists, 2022