



Regional anesthesia techniques for surgical anesthesia in breast cancer procedures

Raghuraman M. Sethuraman, MD

Received: 23 March 2022 / Revised: 28 March 2022 / Accepted: 4 April 2022 / Published online: 2 September 2022
© Canadian Anesthesiologists' Society 2022

Keywords breast cancer surgery · regional anesthesia · surgical anesthesia

To the Editor,

I read with great interest the article that retrospectively analyzed the regional anesthesia techniques providing surgical anesthesia for breast cancer procedures during the COVID-19 pandemic.¹ I greatly appreciate Clairoux *et al.*¹ for their wonderful article on the comparison of the “prepandemic *versus* intrapandemic” practice of anesthesia techniques in patients undergoing breast cancer procedures. I wish to present my reflections on that article with special emphasis on the sensory coverage of regional blocks.

Clairoux *et al.*¹ performed paravertebral blocks (PVBs) on 78 out of 80 patients, and 77 of these patients could undergo surgical procedures under regional blocks and sedation alone in the “intrapandemic” group. Nevertheless, it is difficult to conclude that PVBs would be adequate for all types of breast cancer procedures because PVBs or thoracic epidurals do not cover supraclavicular nerves, pectoral nerves, or other brachial plexus nerves.² Therefore, they cannot provide complete surgical anesthesia in radical mastectomies or if the surgical incision includes the superior pole of the breast; only a combination of regional blocks can achieve that. To make

it simple, we have to consider breast surgeries as “multidimensional” and choose the blocks according to the type of surgery and the extent of the incision with a careful analysis of sensory coverage of the blocks too.³

Clairoux *et al.*¹ have analyzed the time taken for readiness for hospital discharge after the surgery, and also mentioned that they completed eight mastectomies per day in a single operating room thereby clearing the backlog in just a few months during the pandemic. Nevertheless, it would have been better if they had also performed a subanalysis of consumption of operating room time to compare “patient output per day” between the two groups.

Last but not least, there are some confusions in the presentation of the results in Table 2 of that article.¹ Clairoux *et al.*¹ have incorrectly mentioned the percentage of patients for all varieties of techniques under the subheadings “general anesthesia” and “regional anesthesia and sedation” for the “intrapandemic group” in Table 2. For instance, it should be 5% (5/104) for GA with PVBs (not 21%). Similarly, it is 75% (78/104) for PVBs under the “regional anesthesia and sedation” category, which was incorrectly mentioned as 98% in Table 2 and as 77% (80/104) in the “Results” section. I am not sure whether it is correct to include the three patients for statistical analysis in whom the blocks failed. Furthermore, the actual block failure rate would be slightly higher (3.5 *vs* 2.9) as it was calculated against 104 instead of 80.

Declarations

Disclosures None.

Funding statement None.

This letter is accompanied by a reply. Please see Can J Anesth 2022; this issue.

R. M. Sethuraman, MD (✉) ·
Sree Balaji Medical College and Hospital, BIHER, Chennai,
India
e-mail: drraghuram70@gmail.com

Editorial responsibility This submission was handled by Dr. Stephan K. W. Schwarz, Editor-in-Chief, *Canadian Journal of Anesthesia/Journal canadien d'anesthésie*.

References

1. Clairoux A, Soucy-Proulx M, Preto F, et al. Intrapandemic regional anesthesia as practice: a historical cohort study in patients undergoing breast cancer surgery. *Can J Anesth* 2022; 69: 485–93. <https://doi.org/10.1007/s12630-021-02182-0>.
2. Woodworth GE, Ivie RM, Nelson SM, Walker CM, Maniker RB. Perioperative breast analgesia: a qualitative review of anatomy and regional techniques. *Reg Anesth Pain Med* 2017; 42: 609–31. <https://doi.org/10.1097/aap.0000000000000641>
3. Maniker RB, Johnson RL, Tran DQ. Interfacial plane blocks for breast surgery: which surgery to block, and which block to choose? *Anesth Analg* 2020; 130: 1556–8. <https://doi.org/10.1213/ane.0000000000004413>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.