Reviewer’s report

Title: A Prospective, Randomized Comparison of Ultrasonographic Visualization of Proximal Intercostal Block vs Paravertebral Block

Version: 0 Date: 23 Sep 2019

Reviewer: Z Naja

Reviewer's report:

The authors compared ultrasound-guided paravertebral block (PVB) versus proximal intercostal block (PICB) in patients undergoing mastectomy in terms of imaging quality, pain and analgesic consumption. We were surprised with the results of this study showing the superiority of PICB over PVB in terms of visualization given that PVB could be used for analgesia as well as anesthesia in patients undergoing breast surgery especially for those with ASA 3-4 or with morbid obesity [Naja MZ, Ziade MF, Lönnqvist PA. Nerve-stimulator guided paravertebral blockade vs. general anaesthesia for breast surgery: a prospective randomized trial. Eur J Anaesthesiol 2003; 20:897-903 and Naja ZM, Ziade FM, El-Rajab MA, Naccash N, Ayoubi JM. Guided paravertebral blocks with versus without clonidine for women undergoing breast surgery: a prospective double-blinded randomized study. Anesth Analg 2013; 117:252-8].

Moreover, increasing the volume of the local anesthetic in the block might not result in more spread due to possible anatomical variation among patients [Naja MZ, Ziade MF, Rajab ME, Tayara KE, Lönnqvist PA. Varying anatomical injection points within the thoracic paravertebral space: effect on spread of solution and nerve blockade. Anaesthesia 2004; 59:459-63].

Specific comments:

* Abstract:

1. Line 22: the description regarding the number of blocks is not clear (n=56). It would be better to specify the number of blocks in each group. Moreover, in the paper it was written that the number of blocks was 58. Please adjust accordingly.

2. The clinicaltrials.gov number is NCT02911168 (the 8 is missing in page 3)

* Methods:
1. How was blinding achieved?

2. What was the maximum number of injections per patient?

3. Page 12, line 191: it was mentioned that one patient received regional anesthesia instead of general anesthesia. What was the type of regional anesthesia given?

* Discussion:

1. The reason for giving regional anesthesia for one patient could be discussed in this section.

2. The discussion is long.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I recommend additional statistical review

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Please indicate the quality of language in the manuscript:

Acceptable
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