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Minerva Anestesiologica 2022 October;88(10):871-2
DOI: 10.23736/S0375-9393.22.16614-9

Authors' reply to "Role of erector spinae plane block in breast surgeries"

First, we thank Sethuraman¹ for his interest in our recent study on erector spinae plane block (ESPB) use among various surgeries.² The ESPB is a brand-new fascial block with a mechanism of action yet to be clarified and its effectiveness in different clinical settings is not a foregone conclusion. Our meta-analysis showed that ESPB offers opioid-sparing benefits when compared to no block as part of a multimodal pain management regimen. When evaluating breast surgery, we agree that comparing different regional anesthetic techniques that differ greatly in technique and site of injection is not easy due to the anatomical complexity of the region. To date, there are 13 published studies on the use of ESPB in breast surgery. Of these 13, only three evaluated ESPB vs. PECS.³⁻⁵ In the meta-analysis it was demonstrated the inferiority of ESPB over PECS blockade. However, the reported data have too high statistical heterogeneity (I² 84%). Because of the lack of studies comparing ESPB versus other blocks and relevant variations in technique and dosing regimen which can affect individual study results, we do not have sufficiently consistent scientific evidence to declare the superiority of PECS over ESPB. Even the recent PROSPECT guidelines suggested that the limited literature does not allow estimating the efficacy of ESPB on PECS block.⁶ Therefore, we believe that only with more RCTs we can conclude superiority of one block over the other. As we reported in our discussion the key point is that any regional analgesic technique is likely better than no regional analgesic technique

in breast surgery. Regarding the non-inclusion of the article cited by Sethuraman,¹ we did not consider its inclusion because no randomization was specified neither in the materials and methods session neither in the abstract or title. We then decided to apply CONSORT checklists underlying an important inappropriateness in the methods (no trial design, sample size, and randomization criteria were defined). Furthermore, checking in the Iranian Registry for Clinical Trials, we did not find any protocol by searching for the number provided in the text. In addition, the trial reports meperidine consumption at 6 hours, not giving us a 24-hour figure, which was our primary outcome to assess in the meta-analysis. For these reasons, we decided not to include this trial in our meta-analysis. Regarding the article removed from the literature, its retraction occurred simultaneously with our submission to the paper. For this reason, we did not retract that article when meta-analyzing data. In conclusion, in Figure 1^{3, 7-11} we report the forest plot of the results without the retracted article. In this case, we see an increase in heterogeneity in the ESPB versus intravenous analgesia subgroup of analysis (I²=84%), keeping the comparison at significance (P=0.03).

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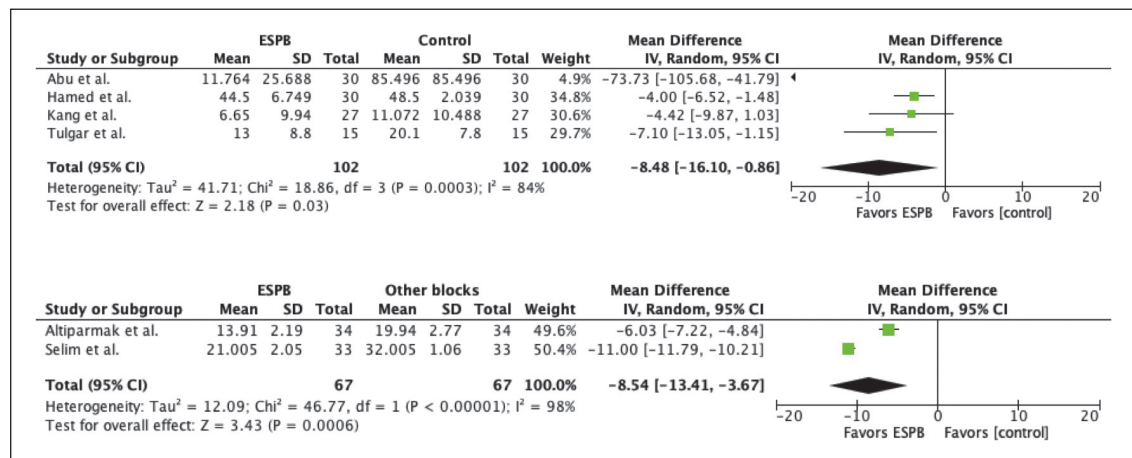


Figure 1.—Forest plot of the results.^{3, 7-11}

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Conflicts of interest.—The authors certify that there is no conflict of interest with any financial organization regarding the material discussed in the manuscript.

Authors' contributions.—Both authors read and approved the final version of the manuscript.

Comment on: Sethuraman RM. Role of erector spinae plane block in breast surgeries. *Minerva Anesthesiol* 2022;88:870. DOI: 10.23736/S0375-9393.22.16536-3.

History.—Manuscript accepted: March 22, 2022. - Manuscript received: March 15, 2022.

(Cite this article as: Fanelli A, Balzani E. Authors' reply to "Role of erector spinae plane block in breast surgeries." *Minerva Anesthesiol* 2022;88:871-2. DOI: 10.23736/S0375-9393.22.16614-9)

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Minerva Anesthesiologica 2022 October;88(10):872-3

DOI: 10.23736/S0375-9393.22.16612-5

Education is needed to honor do not resuscitate decisions

Maintaining goals of care is challenging. We were summoned to an unresponsive 96-year-old woman with chronic obstructive pulmonary disease, pneumonia, hypoxemia, and weakness who was do not resuscitate (DNR). Her family was called in the early morning hours by a junior medical house officer giving them the option to reverse the DNR that they did. After intubation without needed drugs, she was transferred to an intensive care unit where pressors were started to treat hypotension. Following four days of aggressive therapy and no sedation she remained apneic and unresponsive, the DNR was reinstituted, and she was terminally extubated.

The family could have been told that she continued not to do well and come to the hospital as soon as possible, rather than the sudden option of DNR reversal that could only be interpreted as "if you don't reverse the DNR she will die." This is not a criticism of the physician but points to a failure of training for end-of-life care.

A survey of anesthesiologist/intensivist members of medical emergency teams revealed that the most common minimal requirement for ICU admission or CPR was a 50% probability ≥ 6 months of life-expectancy.¹ Most (68%) felt that disagreement on the appropriateness of an ICU admission and unpreparedness of relatives for the imminent patient death were the most frequent reasons for conflicts between intensivists and ward clinicians who were more optimistic about prognosis for 18% of the disagreements.

Maintaining goals of care is even more difficult for house officers. Final year medical students found it distressing to see CPR, almost half never observed CPR, and none ever witnessed a difficult discussion with a distressed patient or family.² Residents receive little formal training about goals of care.³ When residents were given the vignette of an 80-year-old woman with pneumonia, *Clostridium difficile* infection and DNR/do not intubate (DNI) status, 3.6% would allow intubation and 4.1% would permit CPR if she became pulseless.⁴

There is an abundance of literature prescribing education that is focused on the difficult conversations with patients and their families about goals of care. Role play with actors can improve communication skills for difficult family discussions.⁵ However, there have been no reports on how to teach physicians to maintain goals of care after decisions are made. This should be an integral component of medical education mentored by intensivists who understand the ramifications of initiating life support for chronically ill patients and who will be able to foster confidence in learners that DNR/DNI decisions can be respected. Consultation with intensivists should be a