

The effects of fascial plane blocks on chronic pain following cesarean section – too early for certainty? Our analysis of the study by Borys *et al.*

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Dear Editor,

Chronic post-surgical pain (CPSP) can be significant after cesarean section, with emotional and social as well as medical consequences for mothers [1]. In this context, the findings of Borys *et al.* on the impact of the transverse abdominal plane and quadratus lumborum blocks are potentially valuable. While it remains the case that compelling evidence to support regional anesthesia (RA) in this domain is lacking, there are nonetheless reasonable grounds to support on-going evaluation of its role in conjunction with standard multimodal analgesia [2, 3]. Thus the current study is timely and important and warrants scrutiny. We, therefore, would like to raise some relevant considerations.

Firstly, the authors chose to evaluate a possible effect on chronic pain as early as one month post-operatively. Generally, however, the term CPSP is applied to pain persisting three months after surgery, and which is significantly affecting the quality of life [4]. By lowering the time limit to one month, the authors may have overestimated the true incidence of CPSP and indeed have included cases of normal, acute post-operative pain – i.e., pain which is resolving, and reflective of healing. Furthermore, pain existing before surgery, along with the duration and severity of postoperative pain, is a known predictor of CPSP [5]. Although the authors vividly described spinal and other blocks, potentially important information regarding the

management of preoperative labor pain, and perioperative pain, is lacking. We would suggest that they are essential in predicting the incidence and severity of CPSP and might have been useful additions to the data collected. Inadequately treated acute postoperative pain has been implicated as the most crucial factor leading to CPSP [3, 5]. We feel that data about postoperative pain and its management are necessary to ascertain the effects of specific interventions on CPSP.

Furthermore, some aspects of the methodology need to be considered. This is a prospective observational study that carries its own limitations. As it was neither randomized nor blinded, more surgically complicated patients, who would be expected to incur more postoperative pain, were allotted to study groups. To evaluate the impact of a regional block on CPSP, rather than comparing between a control group and one study group, the authors used two blocks in study groups to compare with no regional technique. This raises problems with the interpretation of the data, ultimately.

Finally, it is surprising that despite a lower postoperative consumption of morphine (which intuitively reflects less postoperative pain), the authors reported significantly higher incidences of CPSP in patients who received blocks compared to those who did not. While regional blocks may fail to reduce the incidence of CPSP, it seems counterintuitive that that might lead to a higher incidence and severity

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of CPSP, given existing views on the nature of CPSP. We would welcome the authors' thoughts on this finding. There was also no mention of whether the study patients ultimately received the scheduled multimodal analgesia, or only received it on demand. This information is vital in interpreting the pattern of CPSP among these groups.

We thank the authors for raising this dilemma but would advise caution in its broader application in the light of currently available evidence regarding acute postoperative pain management. As the preponderance of data appears to support the use of RA-based approaches, we should only discard useful field blocks if robust randomized controlled trials show them to be harmful or ineffective.

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REFERENCES

1. Borys M, Potręć-Studzińska B, Wiech M, et al. Transversus abdominis plane block and quadratus lumborum block did not reduce the incidence or severity of chronic postsurgical pain following cesarean section: a prospective, observational study. *Anaesthesiol Intensive Ther* 2019; 51: 257-261. doi: <https://doi.org/10.5114/ait.2019.88071>.
2. Weinstein EJ, Levene JL, Cohen MS, et al. Local anaesthetics and regional anaesthesia versus conventional analgesia for preventing persistent postoperative pain in adults and children. *Cochrane Database Syst Rev* 2018; 6: CD007105. doi: [10.1002/14651858.CD007105.pub3](https://doi.org/10.1002/14651858.CD007105.pub3).
3. Richebé P, Julien M, Brulotte V. Potential strategies for preventing chronic postoperative pain: a practical approach: Continuing Professional Development. *Can J Anaesth* 2015; 62: 1329-1341. doi: [10.1007/s12630-015-0499-4](https://doi.org/10.1007/s12630-015-0499-4).
4. Werner MU, Kongsgaard UE. I. Defining persistent postsurgical pain: is an update required? *Br J Anaesth* 2014; 113: 1-4. doi: [10.1093/bja/aeu012](https://doi.org/10.1093/bja/aeu012).
5. Fletcher D, Stamer UM, Pogatzki-Zahn E, et al. euCPSP group for the Clinical Trial Network group of the European Society of Anaesthesiology. Chronic postsurgical pain in Europe: an observational study. *Eur J Anaesthesiol* 2015; 32: 725-734. doi: [10.1097/EJA.0000000000000319](https://doi.org/10.1097/EJA.0000000000000319).