

In reply: Paravertebral block: the first procedure with “no contraindications” ... really?

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We appreciate the comments and concerns expressed by Bronshteyn and Modest regarding our article titled “Safety of the paravertebral block in patients ineligible for epidural block undergoing pulmonary resection” [1].

A catheter is certainly inserted in the operative field by surgeons; catheter placement usually induces bleeding, which is directly visualized and monitored several times for approximately 10 min before closing the chest cavity. If bleeding occurs within this time, it can be directly stopped by applying pressure or coagulation with a cautery knife. As rightly pointed out by them [2], the paravertebral and epidural spaces are contiguous. Hence, we believe that our procedure via an intrathoracic approach is one of the safest methods to place a paravertebral catheter with respect to bleeding risk. In our procedure, the pleura are separated to the paravertebral space starting from the main incision at the side of the chest cavity. Therefore, the worst possible complication that can arise due to postoperative hemorrhage from the paravertebral space will be hemothorax and not spinal hematoma (and also epidural hematoma) as with the existing procedures. Thus, we consider that this procedure is certainly useful rather than being an absolute contraindication for postoperative pain control among patients on anticoagulation therapy.

As per their claim [2], although our study size remained small despite the subsequent accumulation of over 100

cases, spinal hematoma (and also epidural hematoma) was still a relatively rare complication. While spinal hematoma can potentially occur, its pathophysiology remains mostly unknown [3]. Furthermore, the absolute safety of patients on anticoagulation therapy with respect to bleeding risk cannot be stated. Therefore, we provide detailed information to such patients and their relatives/guardians regarding bleeding risk and attempt to obtain informed consent. Currently, this paravertebral catheter placement trial is still carefully performed as a clinical study under approval from our hospital’s research ethics committee.

Conflict of interest We have no conflict of interest.

References

1. Katayama T, et al. Safety of the paravertebral block in patients ineligible for epidural block undergoing pulmonary resection. *Gen Thorac Cardiovasc Surg*. 2012;60(12):811–4.
2. Bronshteyn YS, Modest VE. Paravertebral block: the first procedure with “no contraindications” ... really? *Gen Thorac Cardiovasc Surg*. 2014 (Epub ahead of print).
3. Horlocker TT, et al. Regional anesthesia in the patient receiving antithrombotic or thrombolytic therapy: American Society of Regional Anesthesia and Pain Medicine evidence-based guidelines (third edition). *Reg Anesth Pain Med*. 2010;35(1):64–101.

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