was the T5 transverse process, which is a polygonal shape with upper hyperechoic edge and characteristic bony acoustic shadow below (Figure 1). This structure should not be confused with the semicircle shape of the ribs ultrasound image lateral to the transverse process. A 9-cm 22-G block needle (StimuQuik, Arrow-International-Inc, Reading, PA, USA) was inserted in a cephalad-to-caudad direction until the tip contacted the T5 transverse process. A mixture of ropivacaine 75 mg and mepivacaine 20 mg in 25 mL of total volume was injected in the plane below the erector spinae muscle and confirmed by visualization of local anesthetic spreading in a longitudinal pattern.

Induction of monitored-anesthesia-care was done by fentanyl 100 mcg and propofol 3 mg/kg, therefore was introduced a supraglottic device (i-gel, Intersurgical-Ltd, Wokingham, UK) for mechanical ventilation. Anaesthesia was maintained with an infusion of propofol targeted to reach a bispectral index value between 40 and 60, no further analgesics was administered.

After recovery from anesthesia the patient was conducted in recovery room where she was monitored using 11-point Visual Analogue Scale (VAS) with three evaluations every 30 minutes. VAS score was 1/10 in all three measurements. The patient was discharged in the surgery ward where she has never requested for rescue analgesics and VAS Score was maintained at 2/10. The length of stay in hospital was 520 minutes throughout.

The ESP block was previously described by Forero *et al.*¹ in video-assisted thoracoscopic surgery and in laparoscopic ventral hernia repair.³ The peculiarity of this block is the simple identification of the ultrasound landmark and the likely safe procedure.² This and other our cases lead us to think that the ESP block could improve the pain relief in some other breast surgery such as quadrantectomy, and it could be a valuable alternative to paravertebral block or other thoracic wall blocks. To our knowledge this is the first description of the ESP block use in breast surgery, and further study are needed to confirm its efficacy.

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Could the new ultrasound-guided erector spinae plane block be a valid alternative to paravertebral block in chronic chest pain syndromes?

Dear Editor,

Chronic chest pain is a common complaint with a significant impact on patients' quality of life and it is often poorly responsive to medical therapy. Paravertebral block (PVB) is currently the gold standard for management of chronic thoracic pain.^{1,2} Unfortunately, contraindications such as coagulopathies or anticoagulant therapies and the difficulty in performing the block, may determine the exclusion of many patients from this treatment.3 We read with great interest Forero's report about the effectiveness of the new Ultrasound-guided Erector Spinae Plane Block (US-ESPB) as analgesic technique in thoracic neuropathic pain.⁴ It would seem to represent a valid alternative to PVB in chronic chest pain management. We describe the case of a 44-year-old patient with unilateral chest pain treated with US-ESPB and secondly with PVB. Written informed consent to

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LETTERS TO THE EDITOR



Figure 1.—Image from the procedure: a 22-gauge 50-mm block needle was inserted in plane, with a cephalad-to-caudad direction.

TP: transverse process; ESM: erector spinae muscle; RM: rhomboid major muscle; TM: trapezius muscle.

the treatment was obtained. The patient had been suffering for 5 years from neuropathic pain on the right side of chest wall, extending in cranium-caudal direction from D5 to D8 level, and from the midline to the midaxillary line. He reported a pain intensity of 8 on Numerical Rating Scale (NRS). The nuclear magnetic resonance (NMR) showed several herniated discs with many protrusions at D5-D6 level. The first treatment was the US-ESPB with deep approach. With the patient in prone position, a high-frequency linear probe (12 MHz) was placed in longitudinal orientation at level of the T6 transverse process, 3 cm from the midline. A 22-gauge 50-mm block needle was inserted in plane, with a cephalad-to-caudad direction (Figure 1), until the tip laid into the plane to deep of the erector spinae muscle. After hydrolocalization with 3 mL of normal saline to open the plane, 20 mL of 0.375% levobupivacaine and dexamethasone 8 mg were injected. The patient had complete resolution of pain for 45 days. After this period the symptoms recurred, but reduced in extension from D5 to D7 with maximum NRS score of 5. Therefore, we decided to perform a PVB in order to prolong the duration of analgesia. With the patient in prone position, a 22-gauge 50-mm block needle was inserted in plane at the level of T6 transverse process. After passing the costotransverse ligament and injecting 3 mL of saline, 0.375% levobupivacaine 20 mL plus dexamethasone 8 mg were injected in the paravertebral space. The downward displacement of the pleura was verified under ultrasound guidance. The patient reported pain relief for 10 days. Both blocks showed an extensive multi-dermatomal sensory block, an effective and comparable analgesic effect, but a significant difference in duration. The US-ESPB has provided a long-lasting analgesia, probably due to the spread of anesthetic solution close to the intervertebral foramina, next to the origin of the dorsal and ventral branches of the thoracic spinal nerves, as suggested by cadaveric investigations.

Further research should be needed to confirm if the US-ESPB could be an effective alternative to PVB in the management of thoracic chronic pain syndrome.

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