



Bilateral erector spinae plane block with single injection

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To the Editor,

Ultrasound guided erector spinae plane (ESP) block is a relatively new block technique described by Forero et al. [1] and many case reports show the efficacy of this technique for different uses. To perform ESP block, transducer is placed in longitudinal parasagittal orientation and erector spinae muscle, trapezius muscle, rhomboid major muscle (rhomboid major muscle is absent below T6 level) and transverse process are visualized and local anesthetic is injected in the area between transverse process and erector spinae muscle [2]. We have been using this technique in our clinic for many different indications and the results are promising [3, 4]. However, performing bilateral blocks can be painful for some patients due to multiple injections. We modified block technique to avoid multiple punctures for these cases. Instead of using longitudinal parasagittal orientation, we placed low-frequency curved ultrasound transducer in transverse orientation and performed the block with out-of plane approach, with a single needle entry from the midline. Informed consent was obtained from patient to present details of the case.

We would like to share our experience with a case of a 54 year-old ASA-I woman, weight 65 kg and height 162 cm who was presented for elective laparoscopic cholecystectomy. The block was performed preoperatively in the holding area. After the appropriate skin disinfection, low-frequency curved ultrasound transducer was placed

in transverse orientation at T8 level and spinous process, transverse process, trapezius muscle, erector spinae muscle were visualized (Fig. 1). The needle was inserted in the midline with out-of plane approach and directed to left and right sides respectively. Twenty milliliters of bupivacaine 0.25% for each side was administered between the area of transverse process and erector spinae muscle bilaterally. After the block was performed, transducer was placed longitudinal parasagittally and scanned for the local anesthetic spread. The spread was seen as similar with the longitudinal approach.

The patient received an uneventful general anesthesia for the surgery. For postoperative pain, tramadol 1 mg/kg and paracetamol 1 g IV was administered and the patient was provided with patient controlled analgesia device containing morphine 0.5 mg/ml. Visual analogue scale was used for monitoring pain. Postoperative 1st, 6th, 12th and 24th hours VAS scores were recorded and found to be as 0, 1, 1 and 0 respectively. The patient was mostly pain free and used 4 mg of morphine in the first 24 h period.

In conclusion, bilateral ESP block with transverse approach with a single needle entry seems an effective modification of the technique that requires further studies.

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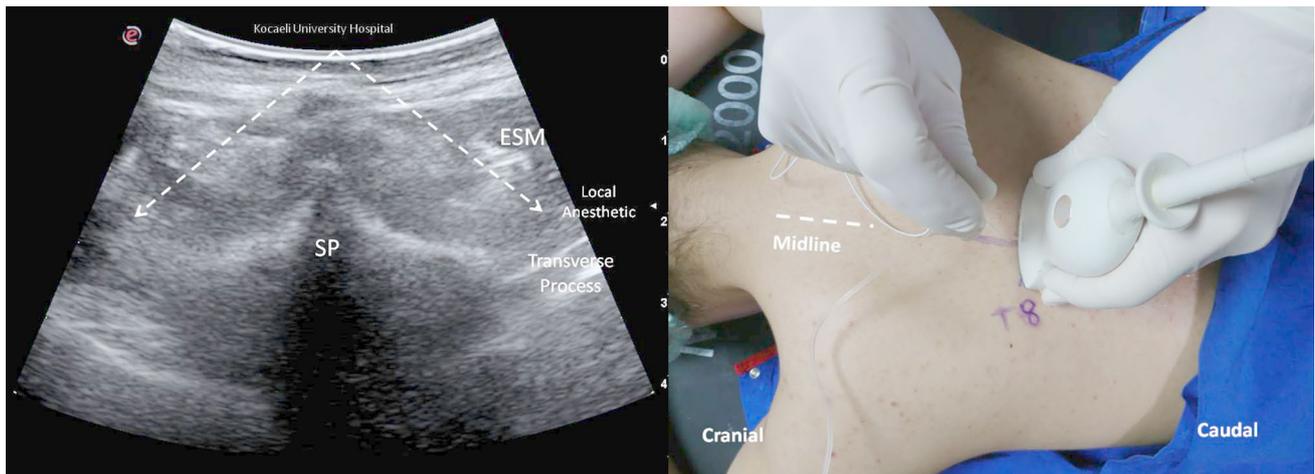


Fig. 1 Transverse ultrasound view of the T8 vertebra. *T* trapezius muscle, *ESM* erector spinae muscle, *SP* spinous process

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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