

CORRESPONDENCE

Landmark guided erector spinae plane block as a part of multimodal analgesia in thoracolumbar spine surgeries

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Dear Editor,

Conventionally, ultrasound guided erector spinae plane block (ESB) has been used for postoperative pain management in lumbosacral spine surgeries.^[1] We want to share our experience with landmark guided erector spinae plane block (LESB) in this set of surgeries.

We have performed LESB as described by Vadera et al.^[2] in four ASA status 1, male patients aged 25 to 40 y, scheduled for surgical decompression and instrumentation (Table 1). Written informed consent was obtained from all patients during pre-anesthesia check-up. LESB was performed in prone position except in second patient in which it was done in lateral decubitus. The block was performed before or after induction, intraoperatively after the closure of muscle layer with the help of surgeon and after completion of surgery but before extubation. Inj ropivacaine 0.2% 20 ml was injected on each side after negative aspiration for blood or air. All patients received standard general anesthesia and there were no significant intraoperative hemodynamic changes or any other adverse events. Intraoperatively, each patient received 1 gm paracetamol, 8 mg dexamethasone and 30 mg ketorolac intravenously as a part of multimodal analgesia. After skin closure,

patients were extubated and shifted to post anesthesia care unit (PACU) for observation. Pain score was recorded using numeric rating scale (NRS). In PACU, our patients received paracetamol 1 gm 6 hourly, ketorolac 30 mg 8 hourly, and pregabalin 75 mg at night as per hospital protocol. Intravenous fentanyl 0.5-1 µg/kg was used as rescue analgesic if required. All four patients reported NRS score ≤ 5 at rest in first 24 h (Table 1) and two patients required rescue analgesia after 18 h following surgery.

The postoperative pain is a nightmare for the patients after spine surgeries especially after instrumentation and fusion surgeries. So, adequate pain relief helps in early mobilization and decrease in morbidity and hospital stay. Ultrasound guided ESB has shown to reduce postoperative opioid requirement and improves patient satisfaction in lumbar spine surgery patients.³ But unfortunately not all anesthesiologists have access to ultrasound machines in the operating rooms. LESB is a simple technique which can be used to provide effective and reliable analgesia in absence of ultrasound. Further investigations and randomized controlled trials are required.

Declaration of patient consent:

Appropriate patient consent was obtained from all patients to be reported in the journal.

Table 1: Postoperative pain score and opioid consumption:

Pt	Surgery	Time of ESPB	Duration of surgery (min)	Numeric Rating Scale					Fentanyl Consumption
				Post Extubation	6 h	12	18	24	
1	T8-T9 spondylodiscitis-Instrumented stabilization and decompression	Post-induction	130	0	1	2	3	4	Nil
2	L4-L5 decompression	Pre-induction	90	0	1	2	3	4	Nil
3	T12 burst fracture with normal neurology - decompression and instrumented stabilization	Before skin closure	120	0	1	2	3	4	20 mcg
4	T10-T12 Instrumented stabilization and decompression	Post-surgery	150	0	1	3	3	5	30 mcg

Conflicts of interest: There is no conflict of interest.

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An alternative approach for continuous monitoring of heart and breath sounds in pediatric patients

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Anesthetic management in neonates, infants and young children is always a challenge. Both esophageal and precordial stethoscopes are used for continuous monitoring of heart and breath sounds in this age group.¹ Recent (2018) publication of Standards for Safe Practice of Anesthesia by World Health Organization-World Federation of Societies of Anesthesiologists (WHO-WFSA) have also recommended monitoring with a precordial or esophageal stethoscope.² By using an esophageal stethoscope both heart and breath sounds can be continuously monitored and any obstruction of endotracheal tube (ETT) can be readily detected. However, the detection of one lung ventilation due to incidental endobronchial ETT placement during surgical positioning and tissue handling may be difficult. Complications of esophageal stethoscope placement have been reported e.g. incidental tracheal and bronchial insertion resulting in hypoxia, hoarseness, oropharyngeal trauma or bleeding.³

Precordial stethoscope on the other hand is a relatively safe, non-invasive and inexpensive alternative to esophageal stethoscope. It is usually fixed on the chest wall to the left of lower part of sternum in order to auscultate both the heart and breath sounds. However, its applicability is limited since it is easily

displaced and its contact with the skin may require frequent refixing during surgery interfering with sterility. The current practice for the fixation of precordial stethoscope varies among anesthesiologists as there is no standard recommendation.

We have used Self Adhesive Fabric Tape (Mefix) in our



Figure-I: Shows stethoscope and Mefix 10×10 fixed in 5th intercostal space for lower abdominal surgery and in the left axilla for contralateral thoracic surgery.