

Conclusions Assessing the use of TEG in standard practice of regional anaesthesia, might lead to implementing a time-saving testing method to prevent future complications from anticoagulant medication.

B111 COMPARISON OF POSTOPERATIVE MORPHINE CONSUMPTION OF ULTRASOUND (US) GUIDED ERECTOR SPINAE PLANE BLOCK (ESPB) AND PARAVERTEBRAL BLOCK (TPVB) IN THORACOTOMY SURGERY PATIENTS

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Background and Aims Thoracotomy is associated with severe postoperative pain (1). According to several studies, paravertebral block (PVB) provides effective analgesia similar to epidural analgesia, and has a less side-effect profile (2). Recently erector spinae plane block (ESPB) has been shown to be an easier and safer alternative to PVB(3). The primary aim of this study was to compare post-thoracotomy opioid consumption between PVB and ESPB.

Methods After the approval of the local ethical committee, patients aged between 18 and 75 years with an American Society of Anesthesia (ASA) physical status I-III, and scheduled for elective thoracotomy were included in the study. Patients were divided into two groups to receive either ESPB or PVB. All patients were provided with PCA device preloaded with morphine. Postoperative 24 hour morphine consumptions were recorded.

Results Data from 45 patients were used in the final analyses. Morphine consumption was higher in the ESP group than in the PVB group at 24 hours postoperatively. (19.2 ± 4.26 mg and 16.2 ± 2.64 mg respectively).

Conclusions In the light of the results of this study, even there is a statistically significant difference on morphine consumptions, clinically ESPB could provide similar postoperative analgesia to PVB in thoracotomy surgeries. In addition, the significant distance from the pleura and vascular structures while performing ESPB and the presence of the transverse process as a barrier reduces the possibility of complications. We think that ESPB can be an alternative to PVB, as a part of multimodal analgesia for post thoracotomy pain.

B112 PERI-CAPSULAR NERVE BLOCK OF SHOULDER JOINT AS A MOTOR SPARING ALTERNATIVE IN ARTHROSCOPIC SHOULDER SURGERIES: A CASE SERIES

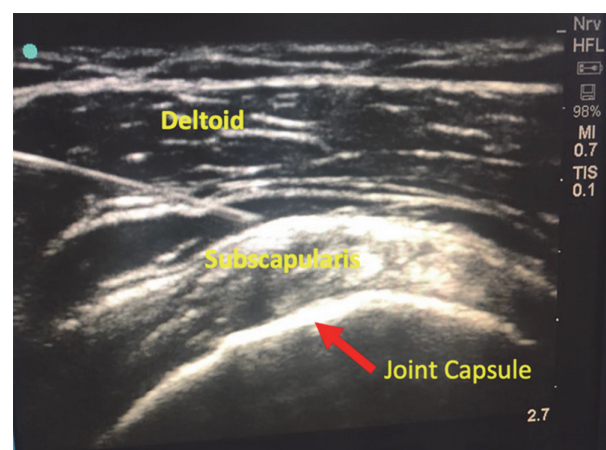
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Background and Aims Arthroscopic shoulder surgeries are frequently done with interscalene block, however it is associated with hemidiaphragmatic paresis (HDP). Recently a pericapsular nerve block around shoulder joint has been described as an diaphragm sparing alternative. Here we report a case-series describing successful use this block in arthroscopic shoulder surgeries.

Methods The block was given preoperatively before general anaesthesia in five cases of arthroscopic Bankart's repair. The

patient was positioned in a supine position with head-end elevated and arm abducted and externally rotated. The block was performed with the linear probe placed over the shoulder capsule and injecting 20 ml of 0.5% bupivacaine between the deltoid and subscapularis muscle (Picture-1). A pre-block and post-block evaluation of the diaphragmatic excursion (DE) was measured. All patients received 2mcg/kg of fentanyl at induction of anaesthesia and patient control analgesia in the post-operative period.



Abstract B112 Figure 1

Results

Abstract B112 Table 1

	Age Sex	Intra-op Analgesia Requirement	Post-Op Analgesia Requirement	Pre-block DE (cm)	Post-Block DE (cm)	Surgeon Satisfaction
Case 1	26/ M	Nil	200mcg fentanyl	1.43	1.44	4
Case 2	24/ M	Nil	125mcg fentanyl	1.51	1.49	4
Case 3	28/ M	Nil	75mcg fentanyl	1.34	1.30	4
Case 4	28/ M	50mcg fentanyl	250mcg fentanyl	1.63	1.59	4
Case 5	26/ M	50mcg fentanyl	150mcg fentanyl	1.43	1.39	4

Conclusions Peri-capsular nerve group block can be used as a diaphragm sparing block in shoulder surgeries. However, its non-inferiority to superior trunk block is to be proved.

B113 LEVO-BUPIVACAINE PLASMA CONCENTRATION FOLLOWING THORACIC ERECTOR SPINAE PLANE BLOCK AND THE EFFECT OF ADDED EPINEPHRINE

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Background and Aims Erector Spinae Plane block (ESPB) has at least 3 reports of probable local anesthetic systemic toxicity¹⁻³, and few local anesthetic absorption reports since first published⁴⁻⁵.

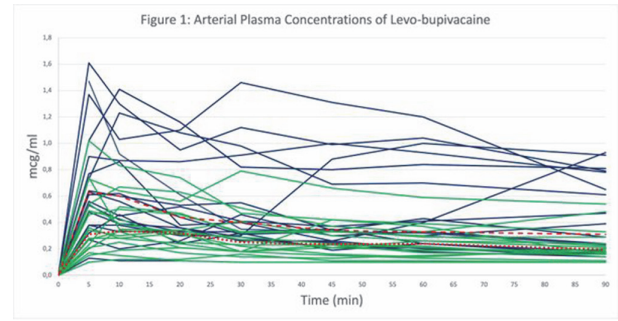
Our primary goal is to measure arterial levo-bupivacaine plasma levels following thoracic ESPB, and the effect of epinephrine addition.

Methods This is a randomized controlled study on ASA I-II patients, undergoing video-assisted thoracic surgery. The study was approved by our Institutional Research Ethic Committee.

Upon written consent, patients were randomized to receive a T5 ESPB with 0.25% levo-bupivacaine 20 mL (LB) or 0.25% levo-bupivacaine plus 100mcg epinephrine, 20 mL (LB-E). ESPB was done by an experienced regional anesthetist. Patients were awake, standard monitoring, iv-line, and arterial line. After ESPB, arterial blood samples were drawn at 5, 10, 20, 30, 45, 60 y 90 minutes. Samples were transferred in EDTA test tubes, plasma was separated and kept at 5°Celsius until analyzed with HPLC technique.

All patients received a standard protocolized general anesthesia after 15 minutes of block completion.

Results 38 patients (19 LB, 19 LE-B) 18–74 years old, were studied. Overall levels and descriptive statistics are presented in figure 1 and 2. Peak arterial plasma concentrations were (median;25–75 percentile) 0.64; 0.50–1.11 mcg/mL in LB group and 0.42; 0.29–0.53 mcg/mL in LB-E group. Mann-Whitney analysis $p=0.0046$. There was no difference in time to peak concentration (median;25–75 percentile): 10 min;5–20 in LB, and 10 min;5–20 in LB-E. AUC calculations were different: LB 46.63 mcg/mL*min (CI95 28.08–65.17) and LB-E 27.91 mcg/mL*min (CI95 15.56–40.26).



Abstract B113 Figure 2

Conclusions Adding epinephrine diminishes levo-bupivacaine arterial plasma levels after thoracic ESPB.

B114 MODIFIED-THORACOLUMBAR INTERFASCIAL PLANE (MTLIP) BLOCK VS ERECTOR SPINAE PLANE (ESP) BLOCK IN PATIENTS UNDERGOING SPINE SURGERIES: A RANDOMISED CONTROLLED TRIAL

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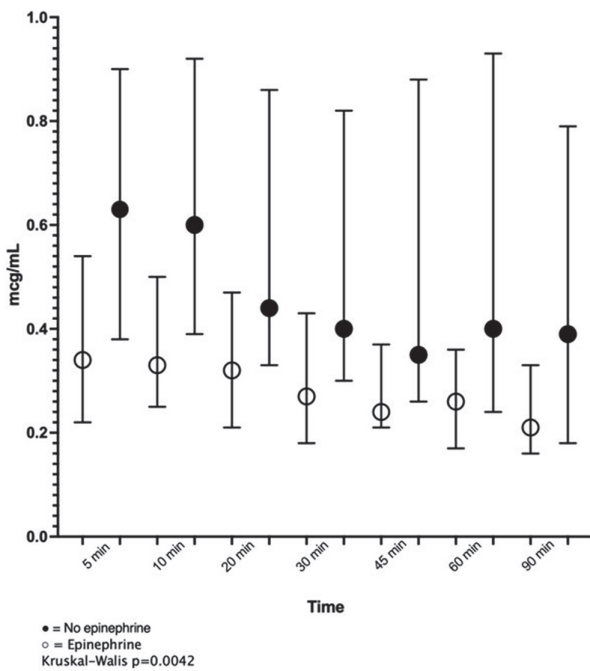
Background and Aims Spine surgery in the thoracolumbar region is one of the most common surgeries performed. The pain management during perioperative period remains a challenge. Interfascial plane block like erector spinae plane block and thoracolumbar interfascial plane block exerts effective analgesic effect during perioperative period in patients undergoing lumbar surgery.

Methods In this randomised, prospective double-blind study, 60 American Society of Anesthesiologists I/II patients, within the age group of 18–60 years scheduled for single or twolevel lumbar discectomy or primary lumbar laminoplasty of two or less levels were recruited. The patients were allocated in either of the two groups: group I: general anaesthesia plus modified thoracolumbar interfascial plane block (mTLIP Group) and group II: general anaesthesia plus erector spinae plane block (ESP group). Perioperative fentanyl consumption and postoperative pain score was recorded for 48 hours. Postoperative patient satisfaction and side effects like nausea, vomiting and sedation were also recorded.

Results Postoperative 48 h fentanyl consumption (μg) was also less in Group II (124.16 ± 80.83) than Group I (189.66 ± 141.11) and this difference was statistically significant ($P < 0.05$). The difference in postoperative pain severity score between the both the groups was significant for the most of the time periods ($P < 0.05$).

Conclusions US-guided ESP block provides superior postoperative analgesia than mTLIP block during first 24 h in patients undergoing spine surgeries.

Figure 2
Epinephrine v/s no Epinephrine



Abstract B113 Figure 1