



Abstract OP019 Figure 1 Lumbar Vs thoracic epidural

**Conclusions** Adding epinephrine to the epidural local anesthetic agent appeared to prevent the development of low blood pressure in patients who received thoracic blocks. We look forward to expanding our study to increase our sample size and perform primary comparisons stratified by block type.

**OP020 EFFICACY OF 20% INTRAVENOUS LIPID EMULSION AS A REVERSAL AGENT OF SPINAL ANAESTHESIA: A DOUBLE BLINDED RANDOMIZED CONTROLLED TRIAL**

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**Background and Aims** A 20% intravenous lipid emulsion (ILE) entraps the lipophilic local anaesthetics and has been useful in managing its systemic toxicity. We hypothesize that ILE can reverse the effects of spinal anaesthesia with the same mechanism.

**Methods** This was a randomized double-blinded controlled trial, sixty patients, aged >18 years were recruited; the ILE group (n = 29) received ILE (1.5 ml/kg bolus followed by

0.25 ml/kg/hr infusion over 30 minutes), and the control group (n = 31), an equal volume of normal saline at the end of surgery. The outcomes measured were: time for 1 and 2-segment sensory regression and time for complete motor and sensory regression from the time of administering study drugs.

**Results** The demographic profile of patients were comparable in both groups. One segment sensory regression ( $21.72 \pm 2.33$  min versus  $29.03 \pm 2.56$  min, p-value <0.001) and 2 segments sensory regression ( $43.45 \pm 4.65$  min versus  $58.1 \pm 5.11$  min, p-value <0.001) were significantly faster in patients who received ILE. Complete sensory recovery ( $200.69 \pm 19.81$  min versus  $237.1 \pm 17.93$  min, p-value <0.001) and motor recovery ( $157.76 \pm 13.1$  min versus  $193.55 \pm 23.03$  min, p-value <0.001) were significantly faster in the ILE group from the end of surgical procedure.

**Conclusions** A 20% ILE significantly reversed the spinal anaesthesia in terms of faster sensory and motor recovery as compared to the control group. Our results encourage the use of ILE in situations like high or total spinal anaesthesia; however, more studies with larger sample sizes are recommended.

**OP021 COMPARISON OF ANALGESIC EFFICACY OF ULTRASOUND GUIDED SACRAL ERECTOR SPINAE PLANE BLOCK WITH CAUDAL EPIDURAL BLOCK IN CHILDREN UNDERGOING LOWER ABDOMINAL AND LOWER LIMB SURGERY UNDER GENERAL ANAESTHESIA: AN EXPLORATORY RANDOMIZED CONTROL TRIAL**

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**Background and Aims** To study the analgesic efficacy of sacral erector spinae plane (ESP) block as compared to caudal epidural in children undergoing lower limb and lower abdominal surgery under general anaesthesia (GA). Though caudal epidural provides excellent pain relief, it has certain limitations. Sacral ESP block is a recently described regional anaesthesia technique where a local anaesthetic (LA) agent is deposited above the sacral bone and below the erector spinae muscle.

**Methods** The study was an exploratory randomized controlled trial. A total of 50 children aged 1–9 years received either ultrasound-guided caudal or sacral ESP block after induction of GA. The outcomes measured were the duration of analgesia, pain scores (FLAC-Revised scale), total rescue analgesia required in 24 hrs.

**Results** A total of fifty children were included, 25 in each group. The demographic profile of children, type of surgery, duration of surgery, and anaesthesia were comparable. Time to the first requirement of analgesia (mean  $\pm$  SD), were comparable in both the groups ( $873.6 \pm 516.74$  mins vs  $828 \pm 583.78$  mins). The total duration of analgesia was also comparable in both the groups ( $965.8 \pm 473.70$  min in Sacral ESP vs  $1003.8 \pm 562.92$  min in the caudal group, P value 0.789).

**Conclusions** Ultrasound-guided Sacral erector spinae plane block was found to be equivalent to caudal epidural block in terms of the total duration of analgesia, postoperative pain scores, postoperative analgesia requirement, and safety profile for children undergoing lower abdominal and lower limb surgeries under general anaesthesia

**OP022 NO ASSOCIATION BETWEEN PLASMA A $\beta$  (40–42) AND CSF NF LEVELS AND COGNITIVE IMPAIRMENT AND FRAILITY IN ELDERLY ORTHOPEDICS SURGERY PATIENTS: A CROSS-SECTIONAL STUDY**

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**Background and Aims** Surgical and anesthetic trauma cause impaired frailty and cognitive dysfunction, especially in elderly patients. Recently, frailty has been linked to cognitive impairment on similar pathophysiological mechanisms (1,2). We aimed to investigate if such an association could be established between plasma A $\beta$  and cerebrospinal fluid Nf proteins and clinical scores.

**Methods** After Institutional Review Board approval (KA 21/124), consecutive patients > 65 years, with informed consent, scheduled for lower extremity orthopedics surgery were enrolled. A sample size of 127 was calculated with a power of 80% at the % $\alpha$ 8.3 significance level Prior to surgery, patients were interviewed for validated Fried Frailty Index (Turkish version) (3) and Mini Mental State Examination (MMSE). Additionally, the venous blood sampling was performed for plasma neuron-specific enolase (NSE), and amyloid  $\beta$  protein 40-42 (A $\beta$ 1-40/42). On the day of surgery, we collected lumbar CSF during spinal anesthesia for analysis of neurofilament light/heavy chain (Nf-L/H) and brain-derived neurotrophic factor (BDNF). MMSE and frailty were evaluated at postoperative 4th week.

**Results** 129 patients comprised the study. Older age was associated with significant increase in preoperative frailty and significant decrease in preoperative MMSE scores ( $p=0.009$ ,  $p=0.005$ ). Postoperative frailty and MMSE scores were higher in comparison to preoperative ones ( $p<0.001$ ). No association was detected between plasma, CSF biochemicals and clinical scores.

**Conclusions** Frailty and cognitive impairment are reported to have common inflammatory markers, proteins, and genetics (4). However, the studied A $\beta$  and neurofilament chain proteins aren't among them. Further research should explore this relationship.

**OP023 THE SUITABILITY AND IMPACT OF INTRATHECAL FENTANYL ADDED TO LOW-DOSE BUPIVACAINE IN PATIENTS WITH PROXIMAL URETERAL STONES UNDERGOING TRANSURETERAL LITHOTRIPSY**

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**Background and Aims** Despite the benefits of spinal anesthesia and the desire of anesthesiologists to perform it, due to the proximity of stone place in ureter and the possibility of pain, restlessness and occasional movements of the patient during surgery, it is less accepted by urologists. This study aimed to compare the effect of low-dose bupivacaine plus fentanyl administered intrathecally in patients undergoing transurethral lithotripsy (TUL).

**Methods** In this randomized, double-blinded clinical trial, from April 2021 to September 2021, 54 patients with proximal ureteral stones candidates for TUL, were enrolled. Patients were randomly divided into two groups; group A received bupivacaine 10mg with 0.5ml of normal saline and group B received bupivacaine 10mg plus 0.5ml (25 $\mu$ g) of intrathecal fentanyl.

**Results** The mean age was  $66.14 \pm 22.46$  years and 74% were male. The total duration of surgery was  $49.44 \pm 14.46$  minutes. Sensory block was adequate for surgery in all patients. The sensory block onset time, sensory block level, pain score, degree of relaxation, depth of motor block, occurrence of anesthesia complications, oxygen saturation and mean arterial blood pressure were not significantly different in two groups. However, the duration of motor block in the group B was longer than group A ( $P<0.0001$ ). In addition, retropulsion was observed only in 5(18.5%) patients in the group A which in compare to group B was significantly higher ( $P=0.019$ ).

**Conclusions** Low-dose bupivacaine with fentanyl 25 $\mu$ g provides adequate spinal anesthesia with lower retropulsion in patients with nephrolithiasis who are candidate for TUL.

**OP024 SADDLE BLOCK VERSUS SPINAL ANAESTHESIA FOR TRANSURETHRAL RESECTION OF THE PROSTATE (TURP): A SYSTEMATIC REVIEW AND META-ANALYSIS**

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