Abstract EP063 Figure 2 Distribution of MBD in cadavers: numerical representation

Conclusions We propose the use of a single injection MT block technique using an injectate volume more than 7.5ml for an effective supraclavicular brachial plexus block.

EP064 Efficacy of erector spine plane block in two different approaches of lumbar spinal fusion surgery

1Jānis Verners Birnbaums*, 3Agnese Ozolina, 2Zane Glāzniece-Kagane, 4Leonīds Solovjovs, 3Alekands Kagans, 1Jānis Nemme, 1Artis Gulbis. Department of anesthesiology; department of intensive care, Riga Stradins University; Riga east university of Latvia, Riga, Latvia; 2Clinic of anesthesiology, Riga East University hospital, Riga, Latvia; 3Clinic of anesthesiology, Riga East University hospital, Riga, Latvia; 4Department of anesthesiology; department of intensive care, Daugavpils Regional hospital, Daugavpils, Latvia; 5Clinic of anesthesiology, Orto clinic, Riga, Latvia; 6Clinic of surgery, Orto clinic, Riga, Latvia

Background and Aims ESPB has shown variable efficiency. We evaluated the efficacy of ESPB in elective lumbar spinal fusion surgery patients with different surgical approaches

Methods Retrospectively 45 elective lumbar TPF patients with TLIF or TLIF+ALIF approaches were divided into 2 groups: general anesthesia (GA,n=24), general anesthesia with ESPB (GA+ESPB,n=21). Primary we analyzed efficacy of ESPB in terms of pain intensity in the first 48h. Secondary – fentanyl free patients and opioid consumption in the first 24h postoperatively. Comparative analysis (SPSS®v.28.0),P<0.05.

Results Out of 45 patients (27 female),21 received GA+ESPB and 24 GA. Average age was 60.3±14.3 years. ESPB was performed in 17 TLIF and in 4 TLIF+ALIF patients. ESPB significantly reduced pain intensity at rest in both approaches 48h after surgery; p<0.05. GA+ESPB when compare with GA increased the number of fentanyl free patients immediately after surgery in TLIF (77%(vs.29%);p=0.01) and TLIF+ALIF (82%(vs.0%);p=0.004) approaches. For those with ESPB fentanyl infusion was started in 6.8±3.2h (23.5% of TLIF) and 8.9±7.6h (75% of TLIF+ALIF) after surgery. ESPB shortened fentanyl infusion time when compare with GA with mean difference(MD) 3.2±4.2h in TLIF:p=0.045, 6.7±5.3h in TLIF+ALIF:p=0.028. Only in TLIF+ALIF approach, ESPB reduced total fentanyl consumption compared with GA 1.43±0.45mg/24h vs.0.93±0.68mg/24h; p=0.015.

Conclusions ESPB reduces pain at rest after lumbar fusion surgery and the number of patients requiring immediate postoperative fentanyl in both approaches, reducing the total fentanyl consumption and duration of infusion. However, application of ESPB not always provide enough analgesia to completely avoid fentanyl administration after surgery in the first 48h.

EP065 Pneumocephalus with late presentation after combined spinal-epidural in a pregnant woman – a case report

1Margarida Telo*, 2Rodrigo Marques Ferreira, 3Andrė Miranda, 4Pedro Antunes, 5Inês Martins Carvalho, 2Anesthesiology, Hospital da Luz Lisboa, Lisbon, Portugal; 4Anesthesiology, Hospital Beatriz Angeló, Lisbon, Portugal

Background and Aims Pneumocephalus (PC), defined as presence of air in the intracranial space, is a rare complication of neuraxial techniques. We describe a case of a pregnant woman submitted to a combined spinal-epidural (CSE) technique who developed PC with late presentation.

Methods 16-year old pregnant woman, 41 weeks of pregnancy, asked for labor pain relief. A CSE with loss of resistance with saline (LORS) technique was performed. The epidural catheter (EC) was used for analgesia during labor work, with complete pain relief and no complications. 9 hours after, the patient was submitted to urgent cesarean section (CS) because of nonmeasuring fetal status. Shortly after the anesthetic bolus via EC, the patient developed apnea, coma and anisocoria and was promptly intubated and ventilated. At the end of CS the patient woke up without neurologic deficits. Cerebral CT scan showed air densities in the right lateral and third ventricle. Bedrest and oxygen therapy was instituted. She developed postural headache treated with analgesia and was discharged 8 days after, fully recovered.

Results PC is often associated with identification of epidural space trough loss of resistance to air (LORA). However, in this case we used LORS. Also, she developed postural headache in the postoperative period, which suggests a dural lesion. The air entrance through the dural defect to the intracranial cavity, during the epidural bolus, seems to be the most likely mechanism of PC.

Conclusions PC usually manifests with headache and resolves spontaneously, however presentation can be atypical and surgical treatment may be necessary in cases of tension PC.

EP066 A systematic review of the use of local anaesthetic wound infiltration by surgically placed rectus sheath catheters in patients undergoing abdominal surgery using midline incision

Mohamed Areef Yehiyan*. General Surgery, Blackpool Teaching Hospitals NHS FT, Blackpool, UK

Background and Aims This systematic review has been performed to assess the efficacy of post-operative analgesia using bolus infusions of local anaesthetic given via rectus sheath catheters in patients undergoing laparotomy via midline incisions.

Methods A PubMed search of the literature has been used to capture all the relevant publications. All studies where rectus sheath analgesia has been compared with placebo and with epidural analgesia have been analysed. The review has revealed that there is considerable variation in the...
methodologies used in the published studies comparing rectus sheath and epidural analgesia and the majority are non-randomised observational studies. Some of the studies suggest that rectus sheath analgesia is less effective than epidural analgesia when assessed with post-operative pain scores and the need for additional opiates analgesia. Others suggest that rectus sheath analgesia gives equivalent pain relief to epidural anaesthesia. Some of the studies show that patients receiving rectus sheath analgesia mobilise quicker than those receiving epidural anaesthesia.

Results All the studies emphasise that rectus sheath analgesia is safer than epidural anaesthesia as it avoids the major complications that can occur with epidural anaesthesia, which include post-operative hypotension leading to anastomotic leakage, epidural haematoma, and epidural abscess formation. The literature shows that complications from rectus sheath analgesia are extremely rare.

Conclusions This systematic review has shown that although further prospective randomised studies are required, rectus sheath analgesia is safe and effective and should be used in preference to epidural analgesia in most patients undergoing laparotomy via midline incision.

ePoster session 2 – Station 6

EP067 SPECIFIC FEATURES SEDATION FOR REGIONAL ANESTHESIA DURING CESAREAN SECTION WITH SEVERE CORONAVIRUS PNEUMONIA

1Evgeny Oreshnikov, 2Svetlana Oreshnikova, 3Elvira Vasylieva, Denisa Tamara, 4Alexander Oreshnikov, 5Anesthesiology and Intensive Care, Chuvash State University, Cheboksary, Russia; 6Obstetrics and gynecology, Chuvash State University, Cheboksary, Russia; 7Internal Medicine, Chuvash State University, Cheboksary, Russia

Background and Aims Spinal and Epidural anesthesia (SA, EA) is the main type of anesthesia for caesarean section (SC). COVID-19 pneumonia which complicates the course of pregnancy, requires a rational choice of sedation and respiratory support to ensure SA and EA.

Methods The safe conduct of SA or EA was ensured by the temporary discontinuation of the use of heparinoids in the perioperative period. SA or EA was performed exclusively in 60 women in labor with severe coronavirus pneumonia. Compliance with the characteristics of SA/EA for CS by coronavirus pneumonia was expressed in the following:

- half sitting at all stages of the perioperative period;
- constant respiratory support, mainly HFO;
- early transfer to the pron-position in the postoperative period;
- predominant use 25-50-75 mg ketamine (not propofol!) for sedation. This approach ensured that there was no need to use general anesthesia for CS.

Conclusions Supplemented with HFO, ketamine, half-sitting SA or EA is the method of choice for CS in labor with severe coronavirus pneumonia.