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 9.9±7.6h (75% of TLIF+ALIF) after surgery. ESPB shortened fentanyl infusion time when compared 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 only provides enough analgesia to completely avoid fentanyl administration after surgery in the first 48h.

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.

Background and Aims Pneumocephalus (PC), defined as presence of air in the intracranial space, is a rare complication of neuroaxial 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 nonreassuring 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.