



Abstract 145 Figure 2

medially, allowing greater surface area for spread of local anesthesia. Vascular structures were further from sciatic nerve, reducing the risk of intravascular injection of local anaesthesia. With tibial nerve approached first medially, risk of common peroneal nerve injury could be reduced compared to lateral approach.

Conclusions Our proposed position for medial approach of sciatic nerve block saves positioning time, with greater surface area for spread of local anaesthesia, likely reducing the risk of intravascular injection of local anaesthesia and common peroneal nerve injury.

146 ADDUCTOR CANAL BLOCK AND FEMORAL TRIANGLE BLOCK: COMPARISON OF TIME TO ACHIEVE DISCHARGE CRITERIA AND EVALUATION OF LOCAL ANESTHETIC SPREAD

N Sakai*, C Taruishi, T Sudani. *Daiyukai General Hospital, Ichinomiya, Japan*

10.1136/rapm-2021-ESRA.146

Background and Aims The femoral triangle block (FTB) and adductor canal block (ACB) have become standard analgesia for total knee arthroplasty (TKA). We compared the anatomical difference and postoperative recovery between two blocks. **Methods** We randomly assigned 118 patients to the FTB or ACB group. Patients were given 10 mL of 0.25% levobupivacaine as FTB or ACB. FTB was defined as at the mid-thigh, and ACB at the apex of the femoral triangle. The primary outcome was to achieve the discharge criteria (pain control with oral analgesics, knee flexion >90°, and ambulatory rehabilitation). ACB would be noninferior to FTB if the 95% confidence interval of the two groups' differences were closer to zero than -9 hours (margin). We compared the local anesthetic spread, straight leg raise (SLR), and other outcomes.

Results The time to achieve discharge criteria was 56.3±17.3 hours in the ACB group and 56.2±18.4 hours in the FTB group, a difference of 0.1 hours (95% CI: -6.4–6.6 hours, p=0.97), establishing noninferiority. At one hour postoperatively, 48 of 60 patients in ACB and 40 of 58 patients in FTB were capable of SLR (Odds ratio:0.59, p=0.29), a non-significant difference. The distance between the two points was 5.1 (4.9–5.4) cm, and the spread of local anesthetics was 6.9 cm cephalad, 5.1 cm caudad. There were no differences in pain scores or other outcomes.

Conclusions ACB was non-inferior to FTB in time to achieve discharge criteria. We must warn of the potential quadriceps weakness after local anesthetic injection because of the high cephalad spread.

147 ERECTOR SPINAE BLOCK FOR ANALGESIA IN A PATIENT HAVING UNDERGONE CLAM SHELL THORACOTOMY

¹S Park*, ²A McDaniel. ¹Imperial College Healthcare NHS Trust, London, UK; ²St Mary's Hospital, London, UK

10.1136/rapm-2021-ESRA.147

Background and Aims A 16 year old male suffered a stab wound to right posterior lower thorax. CT showed a right hydrohaemopneumothorax & right renal laceration and chest drain was inserted. The patient became unstable during operation requiring a clam shell thoracotomy. The patient's haemodynamics improved with multiple blood product transfusions and repeat CT showed an enlarging right perinephric haematoma, and shattered right kidney. He was admitted to ICU for Respiratory weaning but adequate analgesia was challenging, coagulopathy and rising inflammatory markers ruled out epidural. Bilateral erector spinae plane infusions were sited to optimise analgesia.

Methods ESP catheters were inserted at T5 bilaterally. Nerve catheters were placed under ultrasound guidance and 60 ml of 0.25% Levobupivacaine (adrenaline 1:400 000) loading dose administered. A continuous infusion of levobupivacaine at 15 ml/hr was commenced and bolus doses prescribed.

Results ESP catheter infusion continued at 10–15 ml/hr for 10 days with 40 ml of 0.125% levobupivacaine bolus top-ups. The patient was extubated D10 ESP infusion and the infusion was weaned – patient reported 0/10 pain. He was transitioned to regular analgesics with regular pregabalin and PRN oxycodone & discharged to the ward.

Conclusions ESP can be considered as a part of analgesia regime in appropriately selected patient groups. Multiple contra-indications exist in trauma settings. This patient's coagulopathy contraindicated epidural insertion. However, an ESP could be safely inserted, achieving a good level of analgesia.

Overall, the ESP played a pivotal role in this patient's ITU care and the overall recovery from his polytrauma.

148 REVIEWING THE CURRENT REGIONAL ANAESTHESIA SERVICE FOR HIP FRACTURES AT A MAJOR TRAUMA CENTRE

R Kulec*, A Hassan. *Nottingham University Hospitals NHS Trust, Nottingham, UK*

10.1136/rapm-2021-ESRA.148

Background and Aims A Fractured neck of Femur can cause severe pain. There is overwhelming evidence that peripheral nerve blocks are effective in providing analgesia for this injury and reduce serious complications such as the risk of acute confusion, chest infection and time to first mobilisation.¹

In 2018 a landmark Fascia Iliaca Block (FIB) service was set up at the Queen's Medical Centre in Nottingham. Since then, there have been new national recommendations supporting the use of ultrasound to provide a more accurate deposition of local anaesthetic and superior block.^{2,3}

Methods Retrospective data collection on 101 patients who attended the emergency department with a neck of femur fracture. Their notes were reviewed electronically for information on demographics, FIB delivery, pain scores and opioid



Abstract 148 Figure 1

requirements post block. Ethical approval was sought for this project.

Results Approximately 71% of patients received a FIB, the main contraindication was anticoagulation. Levobupivacaine 0.25% was the local anaesthetic of choice. 87% of the blocks were performed by doctors, the remaining by advanced nurse practitioners. 92% were performed via the landmark technique. Approximately 77% of patients scored either moderate or severe pain pre-block, decreasing to approximately 18% post-block. Approximately 39% of patients required analgesia 12 hours post block, and the mean opioid requirements were 3 mg of oxycodone.

Conclusions There has been a significant increase in the number of FIB rates (71%) since 2018 when the average was 8%. Despite this improvement, there is still scope to increase the efficacy. The use of an ultrasound-guided technique will facilitate this change.

149

BRACHIAL PLEXUS BLOCK UNDER DEXMEDETOMIDINE SEDATION FOR SHOULDER ARTHROSCOPY

C Pereira, C Pinto*, CGaio Lima, M Soares. *Unidade Local de Saúde de Matosinhos – Hospital Pedro Hispano, Porto, Portugal*

10.1136/rapm-2021-ESRA.149

Background and Aims Shoulder arthroscopic surgery is associated with significant postoperative pain and opioid consumption. Regional anesthesia is a valuable part of anesthetic management either combined with general anesthesia or as a sole anesthetic technique. However, surgery in beach chair position in an awake state increases patient anxiety and discomfort.

Methods We report a case of a 74-year-old male, ASA III, admitted for arthroscopic rotator cuff repair in an ambulatory setting. He had a history of chronic obstructive pulmonary disease (important bullous emphysema), smoking and past pulmonary tuberculosis.

Results Given the high risk of iatrogenic pneumothorax and postoperative pulmonary complications, we decided to avoid mechanical ventilation. We proceeded with a locoregional technique associated with dexmedetomidine sedation. An interscalene brachial plexus block (BPB) was performed under ultrasonography guidance (in-plane technique) with nerve stimulation. 20 ml of 1% mepivacaine were used.

150

THE EFFICACY OF THE ULTRASOUND GUIDED ICB NERVE BLOCK AND BRACHIAL PLEXUS NERVE BLOCK FOR UPPER ARM TRANSPOSED BRACHIAL-BASILIC ARTERIOVENOUS FISTULA IN VASCULAR ACCESS SURGERIES

D Mathew*, MH Wong. *Khoo Teck Puat Hospital, Singapore, Singapore*

10.1136/rapm-2021-ESRA.150

Background and Aims Transposed brachio basilic arteriovenous fistula (TBBAVF) is often used as an alternative for difficult AVF creation in the forearm or cubital fossa. The proximal site surgical incision close to the axilla frequently extends beyond coverage by a brachial plexus block (BPB) and often requires either rescue local anaesthetic (LA) supplementation or general anaesthesia. We report two cases that were successfully managed with an intercostal nerve block (ICB) and axillary brachial plexus block under ultrasound guidance.

Methods The Institutional Review Board's approval was obtained for these case reports. Two ASA III patients with similar comorbidities of hypertension, hyperlipidemia, diabetes mellitus and end-stage-renal failure, required TBBAVF due to their previous non-functioning AVFs.

An ICB nerve block (figure 1) and axillary BPB (figure 2) were performed under ultrasound guidance in both patients with Ropivacaine 0.25% 10 mL and 0.5% Ropivacaine 25 mL