

design a formula which will help predict with accuracy the depth of the nerves according to the weight of patients benefiting from PNB.

Methods This prospective and analytical study includes children that will undergo limbs surgery. The PNB were realized with a guided ultra-sound or a neurostimulation. Additionally, the Distance between the Nerve and the Skin (DNS) was measured in all children under study. The data were analyzed by SPSS '20' as well as Stata software for a linear regression.

Results 355 patients were included in this study. The average age was $9,29 \pm 4,13$ years old and the average weight was $34,7 \pm 17$ kg. The average DNS was $21,97 \pm 10,02$ mm. The findings also showed an average correlation $R^2 = 0,48$ between the DNS and the children's weight ($P < 0,001$). This enabled us to elaborate a formula to predict the length of the needle according to: the weight of the child, the detecting technique and the PNB type realized [DNS (DNP) = $4,33 + 5,48$ (technique) + $0,23$ (weight) + β (Corresponding to the type of block)]

Conclusions DNS measurement can be a good guide for needle placement in order to reduce the risk of nerves complications.

#36505 CASE REPORT: CONTINUOUS ESP BLOCK FOR EWING'S SARCOMA EXCISION OF THE RIBS IN A PAEDIATRIC PATIENT

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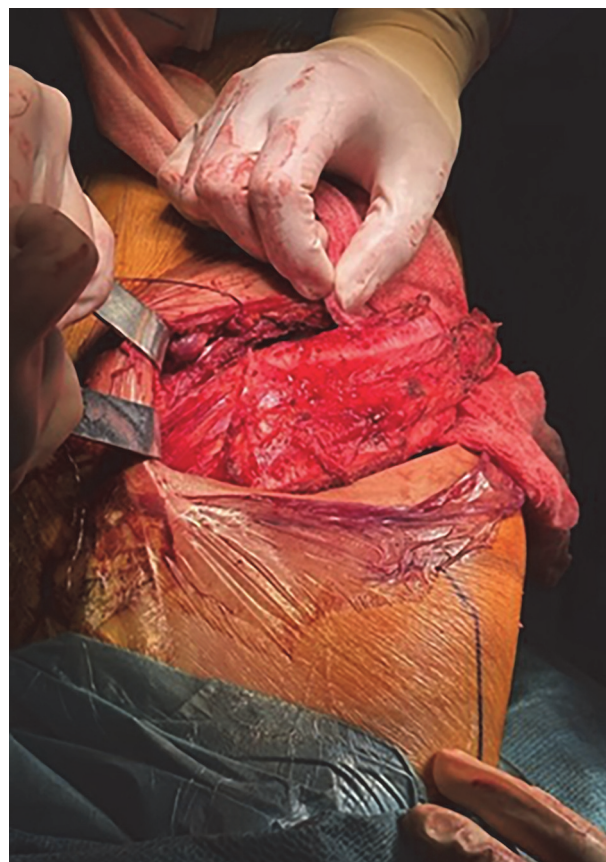
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Background and Aims Erector Spinae Plane Block (ESPB) is a safe and effective analgesic alternative to epidural in patients with coagulation disorders. It was first applied in the paediatric population for postoperative pain management in 2017. It is particularly beneficial in the context of enhanced recovery following surgery protocols and multimodal analgesia. Single-shot or continuous infusion techniques have been previously described, and non-inferiority has been observed when compared with other locoregional techniques.

Methods A 10-year-old boy, weighing 38kg, ASA III, with chemotherapy induced pancytopenia, was scheduled for elective excision of Ewing's sarcoma of the 7th, 8th and 9th ribs. Following parental consent, general anaesthesia was combined with a continuous ipsilateral ESPB, performed under ultrasound guidance at T7 level. A bolus of 19mL 0.2% ropivacaine was administered. Perioperative analgesia was completed with lidocaine (1mg/Kg), ketamine (0.3mg/kg). At the end of surgery, acetaminophen (15mg/Kg) and morphine(0.1mg/Kg) were administered. Postoperative infusion with 0.2% ropivacaine (7ml/h) was combined with 3ml boluses 3 times a day, fix acetaminophen/tramadol and ketorolac SOS.

Results During surgery the patient remained hemodynamically stable. Postoperative pain VAS remained low (0-1), and no rescue analgesia was needed. The catheter was removed on day 7 with extreme patient satisfaction.



Abstract #36505 Figure 1 Ewing Sarcoma Surgical Resection



Abstract #36505 Figure 2 Continuous ESP Block at T7

Conclusions In this case report we demonstrate that continuous ESPB provides safe and effective pain management, as part of multimodal analgesia for thoracic open surgery in a paediatric patient with pancytopenia. Therefore, ESPB may be

considered to be an effective alternative to epidural block in children, even more so in cases of contraindication to the neuraxial approach.

#35634 A CASE SERIES REVIEW EXAMINING THE ROLE OF THE PERICAPSULAR NERVE GROUP BLOCK FOR HIP FRACTURES IN A DISTRICT GENERAL HOSPITAL

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Background and Aims The pericapsular nerve group (PENG) block is a novel regional analgesia technique to reduce pain after hip fracture surgery (1, 2). PENG blocks may be superior to fascia iliaca blocks for post-operative analgesia and its motor-sparing effects (2-4). This case series aimed to explore the feasibility of introducing the PENG block into a local enhanced recovery protocol for trauma patients with hip fracture.

Methods The case series was performed prospectively between January and April 2023 for 25 consecutive trauma patients undergoing hip fracture surgery in a UK district general hospital. All patients were consented prior to surgery to receive the PENG block alongside general anaesthesia or spinal anaesthesia. The use of intra-operative opioids and rescue opioids in recovery were collected. Subsequent oral opioid consumption and early mobilisation status were noted at 24 hours.

Results 15 out of 25 patients received general anaesthesia with the remainder receiving a spinal anaesthetic. Intravenous fentanyl was administered to all patients intraoperatively, with a mean of 115 micrograms. 5 patients required intraoperative alfentanil and morphine in the recovery area. 6 patients did not require oral opioids in the subsequent 24 hour period; the remainder of patients were administered a range of oral opioids from

2.5mg to 10mg (morphine or oxycodone). All patients had early mobilisation within 24 hours of surgery.

Conclusions Locally, the PENG block is a feasible alternative to fascia iliaca blocks, providing effective analgesia perioperatively and promoting early mobilisation. Further randomised controlled studies are required to examine the efficacy of PENG blocks in hip fractures.

#35888 PAIN MANAGEMENT IN AMBULATORY ARTHROSCOPIC ANTERIOR CRUCIATE LIGAMENT RECONSTRUCTION: A RETROSPECTIVE OBSERVATIONAL STUDY

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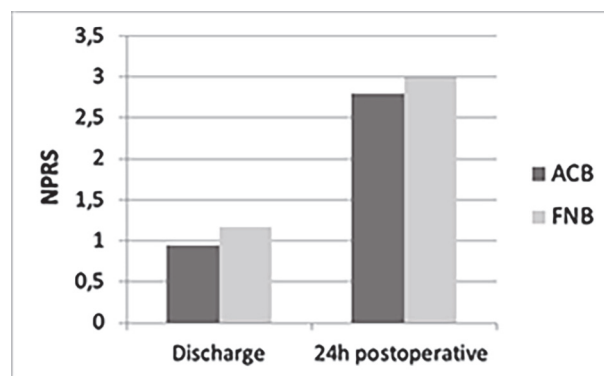
Background and Aims Anterior cruciate ligament reconstruction (ACLR) is associated with moderate to severe postoperative pain, so effective analgesia is necessary for patient satisfaction, early discharge and functional recovery. Although the use of regional techniques is widely accepted, the choice remains controversial. We compare adductor canal block (ACB) versus femoral nerve block (FNB) in our clinical practice.

Methods A descriptive observational retrospective study was designed and its approval by IRB was requested (IIBSP-LCA-2023-67). We included 32 patients that underwent ambulatory ACLR between 2021 and 2022 at our hospital. Anaesthetic techniques, time to discharge and postoperative pain (NPRS) were collected.

Results The most used anaesthetic technique was spinal anaesthesia combined with ACB (table 1). Peripheral nerve blocks were performed with 0.2% ropivacaine. 68.8% of patients received perineural or intravenous corticosteroids, and all patients received intravenous paracetamol and dexketoprofen before surgical incision. There was no difference between ACB and FNB when pain was measured in the immediate postoperative (NPRS 0.95 vs 1.17; $p=0.79$) or at 24 hours (NPRS 2.80 vs 3.00; $p=0.88$) (figure 1). The mean hospital discharge time was 292 minutes (SD=71), with no differences between spinal and general anaesthesia ($p=0.31$) or between regional techniques ($p=0.47$).

Abstract #35888 Table 1 Anaesthetic techniques

Anaesthetic techniques	ACB (20)	FNB (12)
Spinal (28)	18	10
General (4)	2	2



Abstract #35888 Figure 1 Mean postoperative pain (NPRS)

Conclusions ACB and FNB are equally efficacious and the mainstay treatment of postoperative pain after ACLR, as a part of multimodal approach. ACB decreases risk of quadriceps weakness although with low concentration of long-acting local anaesthetic (0.2% ropivacaine) we did not observe prolonged residual motor blockade with FNB. No complications related to regional anaesthesia were reported.

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