

PAEDIATRIC PLAN A BLOCKS **Femoral Nerve**

INDICATIONS: Analgesia for femoral fracture +/- surgery e.g. fracture fixation, femoral osteotomy and slipped upper femoral epiphysis

TARGET: Femoral nerve (FN) deep to fascia iliaca (FI)

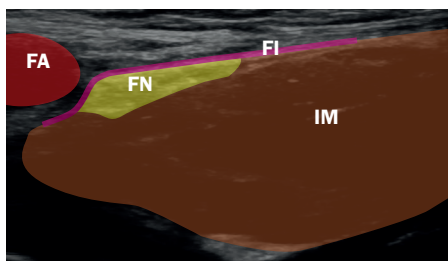
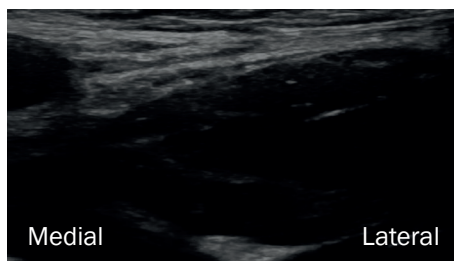
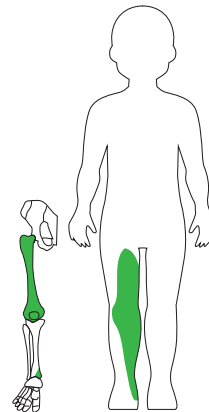
LOCAL: 0.25% Levobupivacaine (max 2.5 mg/kg)
0.2-0.5ml/kg up to 15ml

KIT

- PPE (droplet precautions)
- Gloves
- Linear US probe + cover
- Sterile gel
- 0.5% chlorhexidine
- 50mm or 100mm 22G NR fit block needle
- Syringe for LA
- Gown, drape, and nerve catheter kit if required

PRE-PROCEDURE

- Assistant, monitoring (ECG, SpO2, BP) & IV access
- Usually under general anaesthesia (or sedation if analgesia for fracture) in a paediatric patient
- Operator on side of block, patient supine
- US machine on contralateral side
- Aseptic skin prep (allow to dry)



EXAMPLE TIMINGS

- Intra-operative analgesia usually achieved in 20mins
- Analgesia for 8h+ post block, consider IV dexamethasone 0.2mg/kg to prolong block
- Catheter technique intermittent bolus or infusion regimens both accepted (catheter duration up to 3 days, or longer with close monitoring)

SCANNING

- US probe transverse across upper thigh, just distal to inguinal ligament
- Identify femoral artery (FA), with femoral vein (FV) on medial side, both superficial to fascia iliaca (FI)
- Femoral nerve (FN) lateral to artery, deep to FI & lying on iliacus/iliopsoas (IM)
- Block proximal to division of FA, where FN splits (tilt probe cephalad to optimise view of FN, nerve becomes clearer with hydrodissection deep to FI)

STOP BEFORE YOU BLOCK

(Follow Prep, Stop, Block)

- N.B. Full asepsis and out of plane if catheter insertion
- Block needle in plane (lateral to medial) through single skin puncture
- Low-pressure injection (<15cm H2O), stop if LA spread not seen
- Aspirate every 3 - 5ml and needle reposition
- +/- catheter insertion – check position of catheter under direct vision & secure



REFERENCES

- Aldridge et al (2023) RA-UK Plan A Paeds Blocks Poster – Upper Limb & Trunk and Lower Limb
Bowness et al (2021) International consensus on anatomical structures to identify on ultrasound for the performance of basic blocks in ultrasound-guided regional anaesthesia
<http://dx.doi.org/10.1136/rapm-2021-103004>
Haslam et al (2021) Prep, stop, block: refreshing 'stop before you block' with new national guidance.
<https://www.ra-uk.org/index.php/prep-stop-block>

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