

# PAEDIATRIC PLAN A BLOCKS **Lateral Quadratus Lumborum**

**INDICATIONS:** Analgesia for abdominal surgery below the umbilicus and groin surgery  
E.g. open appendectomy, inguinal hernia repair, orchidopexy

**TARGET:** Plane between lateral border of quadratus lumborum (QL) muscle and the transversus aponeurosis

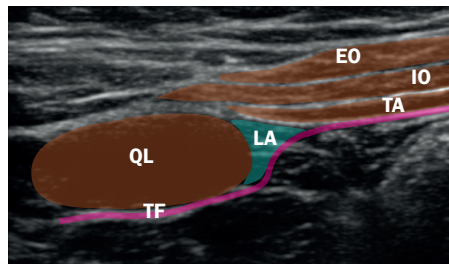
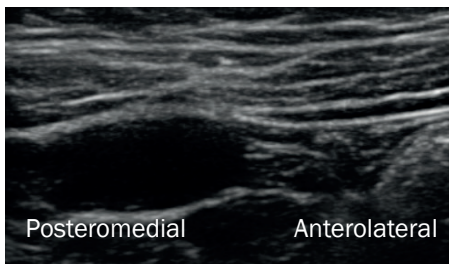
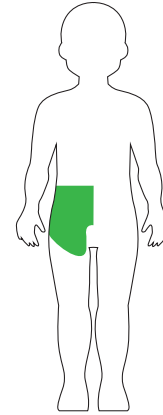
**LOCAL:** 0.25% Levobupivacaine (max 2.5 mg/kg)  
0.5ml/kg up to 20ml (minimum volume 0.3ml/kg)

## KIT

- PPE (droplet precautions)
- Gloves
- Linear US probe + cover
- Sterile gel
- 0.5% chlorhexidine
- 50mm (up to 20kg) 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 in a paediatric patient
- Patient in supine position, slightly tilted if required, operator on the same side of the patient
- Aseptic skin prep (allow to dry)



## EXAMPLE TIMINGS

- Intra-operative analgesia usually achieved in 20-30mins
- Analgesia for 12+ hr post block, consider IV dexamethasone 0.2mg/kg to prolong block
- Catheter technique intermittent bolus (preferred) or infusion regimens both accepted (catheter duration up to 3 days, or longer with close monitoring)

## NOTE

- Lateral positioning (and posterior to anterior in plane approach) for nerve catheter insertion allows the catheter to be distant from the surgical site
- For orchidopexy, supplemental local required for scrotal incision

## SCANNING

- US probe transverse placed just above the iliac crest with patient lying supine
- Identify the three abdominal muscles, external oblique (EO), internal oblique (IO) and transversus abdominus (TA)
- Scan posteriorly until transversus abdominus tails off and form the transversus aponeurosis (thick white line), the QL muscle (usually more hypochoic) lies deep to this structure

## STOP BEFORE YOU BLOCK

(Follow Prep, Stop, Block)

- N.B. Full asepsis if catheter insertion
- Needle in plane (anterior to posterior) through single skin puncture
- Insert needle deep to IO aponeurosis but superficial to TA aponeurosis at lateral margin of QL
- Low-pressure injection (<15cm H2O), stop if LA spread not seen
- Aspirate every 5 ml & every 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  
Ashken et al (2022) Recommendations for anatomical structures to identify on ultrasound for the performance of intermediate and advanced blocks in ultrasound guided regional anaesthesia.  
<http://dx.doi.org/10.1136/rapm-2022-103738>  
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>

## Authors

Nick Record, Su Ying Ong, Karen Pearson, Annabel Pearson, James Bowness, Alasdair Taylor.

## Contact

✉ [suyingong2@nhslothian.scot.nhs.uk](mailto:suyingong2@nhslothian.scot.nhs.uk) [suying87](https://www.linkedin.com/in/suying87) & [bowness\\_james](https://www.linkedin.com/in/bowness_james)



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