

# PLAN A BLOCKS **Rectus Sheath**

**INDICATIONS:** Analgesia for midline surgical procedures & PEG insertion

\*N.B. Often a

**TARGET:** Plane between rectus abdominis (RA) & posterior layer of rectus sheath (RSp)

catheter technique

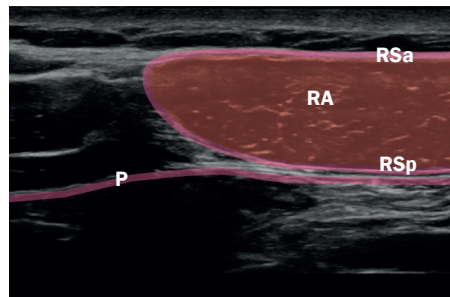
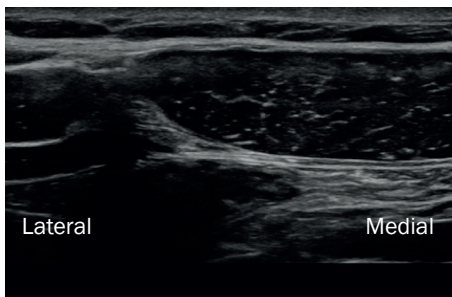
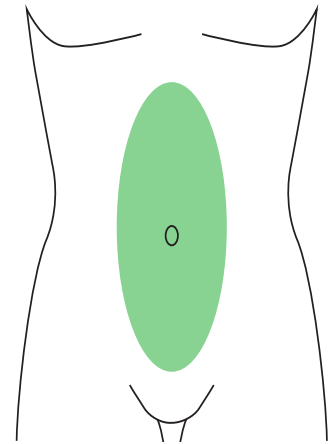
**LOCAL:** ≤40 ml (20 ml each side) plus local for skin

## KIT

- PPE (droplet precautions)
- Sterile gloves
- Linear US probe + cover
- Sterile gel
- 0.5% chlorhexidine
- LA for skin (+ syringe/needle)
- 80 mm 22G NR fit block needle
- 2 x 20 ml syringe for LA
- Catheter technique: 18G Tuohy plus gown/mask/drape/sterile tray

## PRE-PROCEDURE

- Assistant, monitoring (ECG, SpO<sub>2</sub>, BP) & IV access
- Operator to block side, patient supine US machine on contralateral side
- Aseptic skin prep (allow to dry)



## SCANNING

- US probe transverse (sagittal for catheter), midway between level of umbilicus & xiphisternum (avascular transpyloric plane)
- (N.B. Can also scan/perform in sagittal plane)
- Identify linea alba in midline & RA laterally, with RSp & peritoneum (P) deep to muscle, & anterior layer of rectus sheath (RSa) superficial

## STOP BEFORE YOU BLOCK

(Follow Prep, Stop, Block)

- N.B. Full asepsis if catheter insertion
- LA to skin
- Needle in plane (lateral to medial block, superior to inferior if catheter) through single skin puncture each side
- RA will peel off RSp with LA injection
- Low-pressure injection (<15 cmH<sub>2</sub>O), stop if LA spread not seen
- Aspirate every 5 ml & every needle reposition
- +/- catheter insertion - leave 5 cm in space & secure
- Bilateral blocks are often required: midline abdominal innervation is from both sides

## EXAMPLE TIMINGS

0.25% levobupivacaine (toxic dose 2 mg/Kg)

- Onset 20 min
- Analgesia 12+ hr post block
- Catheter technique: intermittent bolus or infusion regimens both accepted (catheter duration 3-5 days)

## POST-PROCEDURE

- Monitor for minimum 30 min (as per AoA Standards of Monitoring)
- Document procedure and sensory blockade
- Test block after 20 min (sensation)

## CAUTION

- Risk injury to peritoneum
- Risk epigastric vessel injury, particularly at/below level of umbilicus



RA-UK Posters

## REFERENCES

- Barron et al (2020) RA-UK Plan A Blocks Poster – Upper Limb & Trunk  
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>



Endorsed by the  
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of Regional  
Anaesthesia  
& Pain Therapy



Created by  
Nick Record, James Lloyd, Owen Lewis, James Bowness, Alasdair Taylor  
Contact

✉ [james.bowness@jesus.ox.ac.uk](mailto:james.bowness@jesus.ox.ac.uk) & [alasdair.taylor2@nhs.scot](mailto:alasdair.taylor2@nhs.scot) [🌐 bowness\\_james](https://www.linkedin.com/company/bowness_james)