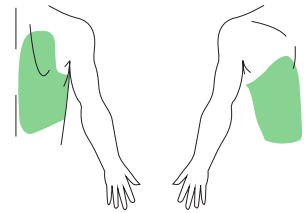


ICU PLAN A BLOCKS Thoracic Erector Spinae Plane

INDICATIONS: Rib fracture analgesia, post-op analgesia for thoracotomy, intercostal drain analgesia

TARGET: Plane between the transverse process and erector spinae muscle group, unilateral or bilateral.

LOCAL: 20-30 ml on each side (as applicable)



EQUIPMENT

- ICU-appropriate PPE
- Use a high-frequency (10 to 15 MHz) linear array transducer or low-frequency (2 to 5 MHz) curvilinear transducer
- Probe cover and gel
- Chlorhexidine 0.5%
- Local anaesthesia for the skin
- 80 NRFit block needle for a single shot
- If using a continuous technique: epidural catheter kit e.g. 80mm NR fit 18-19G Touhy

ICU PROCEDURE CHECKLIST

A: Airway secure and safe **B:** Ventilation and oxygenation adjusted **C:** Cardiovascular stability, vasopressors if increased sedation **D:** Sedation and analgesia, skin infiltration for block
E: Everyone on board. Unit quiet. No other priorities. Adequate personnel. Free of emergency call duties.

Patient focus:

- Recheck and mark the side of the block
- Check coagulation profile, platelet count and drug chart (anticoagulation)
- Consider weight-based maximum local anaesthetic dose, dose reduction in organ failure, low protein states, especially for continuous infusion, large or repeated boluses
- Valid consent or incapacity documentation. NOK informed?

PRE-PROCEDURE

- Complete ICU procedure checklist
- Patient position sitting or lateral
- Position US machine on the side opposite to the clinician (patient facing the screen)
- Ensure appropriate monitoring

PREP

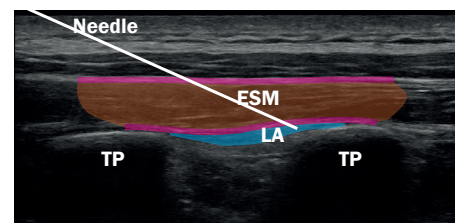
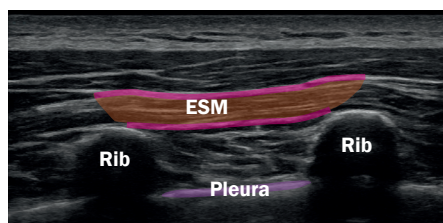
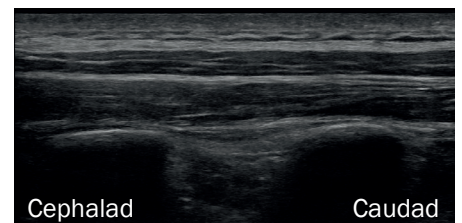
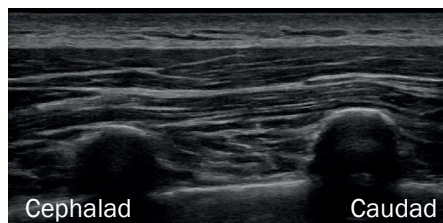
- US transducer parasagittal, midway between vertebral spinous processes and medial border of scapula (in middle of intended dermatomal coverage)
- Slide the transducer medially to observe rounded ribs and pleura becoming deeper, transitioning to flatter-topped transverse processes (TP)- the pleura may no longer be visible unless the transducer is tilted laterally
- Fix the transducer with the lateral tip of the TP visible
- Ensure asepsis (if catheter use gown, drape and probe sleeve)

STOP

- Confirm skin mark and consent

BLOCK

- Local anaesthesia to skin
- Needle inplane from either cephalad or caudad
- Aim needle tip for posterior surface of TP



REFERENCES

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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