Erector Spinae Block and Catheter Insertion - Summary Clinical Guideline

Reference No: CG-STEP/2020/009

These guidelines will be implemented in areas caring for adults with rib fractures, where nursing and medical staff have appropriate training in Erector Spinae Catheter (ESC) management. This includes SAU, standard surgical wards, SDU and HDU/ICU.

ESCs are indicated for adults with rib fractures, assessed as per Chest Wall Trauma (Blunt) Clinical Guideline, where pain is not controlled with routine analgesia, where they cannot deep breath, or where epidural is contraindicated, under guidance of acute pain team, and on-call anaesthetist / SDU consultant.

ESCs should only be inserted by anaesthetic consultants, registrars or staff grades with appropriate experience of ultrasound guided regional techniques. These may be inserted on a normal ward with appropriate monitoring in place at the time of insertion and for the 30 minutes after loading with local anaesthetic.

IF PATIENT WEIGHS <50KG, CALCULATE LOCAL ANAESTHETIC DOSE CAREFULLY

ENSURE SEVERE LOCAL ANAETHETIC TOXICITY GUIDELINE AND INTRALIPID READILY AVAILABLE

Implementation

- Load erector spinae plane with 30-40mls 0.25% levobupivacaine prior to attaching and commencing infusion.
- Use 0.25% Bupivacaine via dosifuser for ongoing infusion of local anaesthetic at pre-set rate of 5.2ml/hr. 0.125% infusions may be considered as an alternative (normally in low body-weight patients or where regular top-up boluses are necessary)
- Consider delaying connection of dosifuser is 4 hourly total local anaesthetic dose exceeds 2mg/kg ideal body weight.
- **Lignocaine patches should not be used on patients with ESCs / epidurals**.
- Ensure multimodal analgesia is prescribed on EPMA as per rib fracture order set, including NSAIDs where appropriate, and PRN opiates.
- Heart rate, blood pressure, oxygen saturations and respiratory rate to be recorded every 15 minutes post insertion for the first hour, then hourly until 4 hours post insertion, and then every 4 hours thereafter.
- Ask specifically about symptoms of local anaesthetic toxicity at 30 minutes and 60 minutes post loading dose.
- Review daily the insertion site for signs of redness, swelling, dislodgment or leakage.

- Removal of catheter: document procedure and review catheter to ensure it is complete.

Pain assessment

The 0-10 pain assessment score should be used, both at rest, and through functional assessment (deep breathing / coughing / moving).

For further information on:

- ESC insertion
- Troubleshooting poor pain relief
- Boluses for breakthrough pain
- Catheter disconnection
- Management of severe local anaesthetic toxicity

Refer to:

ERECTOR SPINAE BLOCK AND CATHETER INSERTION – FULL CLINICAL GUIDELINE

See also:

CHEST WALL TRAUMA (BLUNT) – FULL CLINICAL GUIDELINE

For advice or help with problems contact acute pain team or SDU consultant in hours, or Anaesthetic SR on-call out of hours