Thoracic Epidural Blockade and Paravertebral Blockade Guideline

Online training videos can be accessed using the following link: https://coursecraft.net/courses/z9WY4/splash

To enrol and access the videos:

- Click on the blue 'Enrol' button
- Enter your email address and click next
- Enter your full name and a password and click complete signup
- Enter your location – country and region and click complete enrolment
- Click view course now
- Click on 'TOPIC2 intervention training videos'
- There are two videos for each intervention, click play on the video you want to watch

TOPIC 2 Thoracic Epidural Blockade Procedure

Peri-operative Utilisation

- Institute full monitoring according to AAGBI guidelines.
- Ultrasound or landmark technique can be used for insertion.
- Catheter insertion should be at the appropriate level for skin incision.
- Following an appropriate test dose, an adequate first dose should be given through epidural catheter (e.g. 3-5 ml of 0.25% levo/bupivacaine). Preservative free opiate can be added (e.g. 2-3 mgs of diamorphine). Further boluses of local anaesthetic should be given if appropriate.
- An infusion should be started and used with epidural catheter (e.g. 0.125% levo/bupivacaine and 4mcg/ml fentanyl at a rate 0.1-0.25 ml/kg/h) before the end of the operation.
- All patients should receive additional analgesia (e.g. intravenous Paracetamol, NSAIDs, opiates) if appropriate.

Post-operative Utilisation

- The patient should be assessed regularly and if they have pain, the rate of the infusion can be changed in order to provide adequate pain-relief or further titrated boluses (e.g. 3-5mls of 0.125% levo/bupivacaine with 4mcg/ml fentanyl) should be given for breakthrough pain. Boluses can be directed and given by clinical team or by patient controlled epidural analgesia.

- All thoracotomy patients should be looked after in an appropriate clinical area with regular monitoring. Epidural should be stepped down to oral/IV analgesics after 48 hours.

- Patients should receive regular oral analgesics such as paracetamol and/or NSAIDS; iv morphine PCA should be available for rescue pain-relief.

- Pain score, motor block, nausea and vomiting, neurological status, physiological parameters and area of anaesthetized chest wall should be regularly assessed. The rate of infusion and administration of top-ups should be given according to local policy.

- If the blood pressure is persistently low and other surgical causes of low blood pressure have been ruled out, the diagnosis of epidural associated hypotension is made. If appropriate, vasopressor support for blood pressure should be started according to local policy.

- During the post-operative period, any complications of epidural analgesia should be noted. Advice from the acute pain team and the anaesthetist should be sought if pain control is problematic. Alternative analgesia can be given as per patient requirement.

Peri-operative Utilisation

- Institute full monitoring according to AAGBI guidelines.
- Ultrasound or landmark technique can be used in insertion.
- 3 preoperative PVB injections at the appropriate levels for skin incision (e.g. 10-15 ml 0.25% levo/bupivacaine with or without adrenaline (1:200000-400000) for each injection).
- Paravertebral catheter should be inserted under direct vision at the appropriate level as early as convenient. Once the surgical paravertebral catheter is inserted, an adequate bolus should be administered via the catheter (e.g. 10 ml 0.25% levo/bupivacaine). Further boluses of local anaesthetic should be given if appropriate.
- An Infusion should be started before the end of the operation (e.g. 0.125% levo/bupivacaine at 15ml/hr or 0.25% levo/bupivacaine infusion at 10 ml/hour).
- All patients should receive additional analgesia (e.g. intravenous Paracetamol, NSAIDs, opiates) if appropriate.

Post-operative Utilisation

- The patient should be assessed regularly and if they have pain the rate of the infusion can be changed in order to provide adequate pain-relief or further titrated bolus of local anaesthetic (e.g. 3-5mls of 0.25% levo/bupivacaine) can be given for breakthrough pain.
- All thoracotomy patients should be looked after in an appropriate clinical area with regular monitoring. Paravertebral blocks should be stepped down to oral/IV analgesics after 48 hours.
- Patients should be prescribed regular oral analgesics such as paracetamol and/or NSAIDS; iv morphine PCA should be available for rescue pain-relief.
- Pain score, motor block, nausea and vomiting, neurological status, physiological parameters and area of anaesthetized chest wall should be regularly assessed. The rate of infusion and administration of top-ups should be given according to local policy.
- If the blood pressure is persistently low or there any other signs of epidural spread or local anaesthetic toxicity the infusion should be stopped immediately and the patient managed according to local policy.

- During the post-operative period, any complications of paravertebral infusion should be noted. Advice from the acute pain team and the anaesthetist should be sought if pain control is problematic. Alternative analgesia can be given as per patient requirement.