PROCEDURE CHECKLIST

Fascia iliaca compartment block

Injection of a large volume of dilute long-acting local anaesthetic deep to the fascia iliaca to block the femoral, lateral femoral cutaneous and (variably) obturator nerves, for analgesia in hip and femoral neck fracture.

EM Orbit

Patient reference | Date | Time | Completed by

Equipment ready

- [ ] Skin antiseptic, sterile gloves, drape
- [ ] Landmark technique: blunt short-bevel needle (e.g. 18–22 G, 50–100 mm) with extension tubing
- [ ] Ultrasound technique: ultrasound machine, high-frequency linear probe, sterile probe cover and gel, block needle (short bevel, in-plane visibility)
- [ ] Long-acting local anaesthetic (levobupivacaine or bupivacaine) drawn up and labelled; lidocaine 1% for skin
- [ ] Syringes sufficient for the planned volume
- [ ] Monitoring: ECG, non-invasive blood pressure, pulse oximetry
- [ ] IV access
- [ ] Resuscitation equipment and 20% lipid emulsion immediately available

Before · Assessment and consent

- [ ] Confirm the indication and give interim systemic analgesia per the pain management guideline.
- [ ] Examine and document the neurovascular status of the limb and femoral nerve function (quadriceps power, anterior thigh sensation) before the block.
- [ ] Consider compartment syndrome risk and agree the plan with the orthopaedic team if in doubt.
- [ ] Check allergies, weight, anticoagulants, coagulation results and the skin at the injection site.
- [ ] **Calculate the maximum safe dose from the actual weight before drawing up: bupivacaine or levobupivacaine 2 mg/kg (maximum 150 mg); lidocaine plain 3 mg/kg.**
  Frail or low-weight patients may need a lower concentration or reduced volume; follow local protocol.
- [ ] Choose the concentration and volume.
- [ ] Explain the block, benefits and risks (failure, bleeding, infection, nerve injury, toxicity, temporary leg weakness) and obtain consent, or follow best-interests procedures if the patient lacks capacity.

Before · Safety checks and preparation

- [ ] Site an IV cannula and attach monitoring.
- [ ] **Confirm 20% lipid emulsion and resuscitation equipment are available before injecting.**
- [ ] **Perform 'Stop Before You Block': confirm the correct side with the patient, the notes, the imaging and the marked limb immediately before needle insertion.**
  Wrong-side block is a never event.
- [ ] Position the patient supine with the legs straight; expose the groin and anterior thigh.
- [ ] Prepare the local anaesthetic in labelled syringes and record the dose before starting.

During · Landmark technique: marking

- [ ] Draw a line between the anterior superior iliac spine and the pubic tubercle (the line of the inguinal ligament) and divide it into thirds.
- [ ] Mark the point 1 cm below the junction of the lateral third and the medial two-thirds.
- [ ] **Palpate the femoral artery and confirm the entry point is clearly lateral to it.**
- [ ] Clean the skin with antiseptic, drape and infiltrate the skin with lidocaine 1% (counting it towards the total dose).

During · Landmark technique: needle and injection

- [ ] Insert the blunt short-bevel needle perpendicular to the skin at the marked point.
- [ ] Advance slowly until you feel the first loss of resistance (fascia lata) and then a second (fascia iliaca).
- [ ] **Stop advancing once through the fascia iliaca; do not advance further.**
- [ ] **Aspirate before injection and after each increment of local anaesthetic.**
- [ ] Inject the calculated volume slowly in increments, aspirating between each; the injection should be easy, without high resistance.
- [ ] **Stop injecting if the patient reports severe pain or paraesthesia, if there is high resistance, or if blood is aspirated; reposition.**

During · Ultrasound technique: scan

- [ ] Place the linear probe transversely over the inguinal crease and identify the femoral artery and vein.
- [ ] Slide the probe laterally to identify the fascia iliaca as a bright line over the iliopsoas muscle, with the sartorius muscle superficial and lateral.
- [ ] Identify the iliacus and psoas muscles deep to the fascia, and keep the needle path clear of the femoral vessels.
- [ ] Plan an in-plane approach from lateral to medial, keeping the whole needle and tip visible.

During · Ultrasound technique: needle and injection

- [ ] Clean the skin, drape, cover the probe and infiltrate the skin laterally with lidocaine 1%.
- [ ] Advance the needle in-plane through the fascia lata and into the plane beneath the fascia iliaca, above the iliopsoas muscle.
- [ ] **If the needle tip cannot be seen, stop advancing and realign the probe or the needle.**
- [ ] Aspirate, then inject a small volume and watch the fascia iliaca lift off the iliopsoas muscle to confirm position.
- [ ] Continue injecting in increments with aspiration between each; watch the spread lateral to the nerve towards the iliac crest and medially towards the femoral nerve.
- [ ] **Stop injecting if the patient reports severe pain or paraesthesia, or if there is high resistance.**

During · Local anaesthetic toxicity

- [ ] Talk to the patient throughout and watch for early signs of toxicity.
- [ ] **If local anaesthetic toxicity is suspected, stop injecting, call for help, manage the airway and circulation, and give 20% lipid emulsion 1.5 mL/kg IV bolus followed by an infusion per the national LAST guideline.**
- [ ] Withdraw the needle and apply a dressing.

After · Monitoring and documentation

- [ ] Continue monitoring for at least 30 minutes after the injection.
- [ ] Assess and record the effect on pain scores (at rest and on gentle movement) and the extent of sensory block.
- [ ] **Warn the patient and the nurse that the leg will be weak and numb and that the patient must not stand or walk unaided.**
  Falls risk.
- [ ] Protect the numb limb from pressure injury and keep the pressure areas checked.
- [ ] **Do not repeat the block or top up with other local anaesthetic without recalculating the cumulative dose.**
- [ ] Document indication, consent, side check, technique, needle, drug, concentration, volume and total dose in mg and mg/kg, aspiration, complications and effect.

- [ ] **Prescribe regular and breakthrough analgesia for when the block wears off, and tell the receiving team the time of the block, drug and dose.**
