PROCEDURE CHECKLIST

Haematoma block for distal radius fracture

Injection of plain lidocaine directly into the fracture haematoma of a closed distal radius fracture to provide analgesia for manipulation and immobilisation.

EM Orbit

Patient reference	Date	Time	Completed by

Equipment ready

- [ ] Skin antiseptic (e.g. chlorhexidine in alcohol), sterile gloves and drape
- [ ] Lidocaine 1% plain (without adrenaline)
- [ ] 10 mL syringe and 21–23 G needle
- [ ] Dressing
- [ ] X-ray access
- [ ] Plaster or backslab materials and padding
- [ ] Monitoring and IV access available
- [ ] Resuscitation equipment and 20% lipid emulsion available

Before · Assessment and consent

- [ ] Confirm the diagnosis on X-ray and that the fracture is closed and needs manipulation.
- [ ] **Examine and document the distal neurovascular status before the block: radial pulse, capillary refill, and median, ulnar and radial nerve function.**
  Pay particular attention to the median nerve.
- [ ] Look for skin breaks, blistering, infection or swelling that would contraindicate the block.
- [ ] Check allergies, weight, anticoagulants and previous reactions to local anaesthetic.
- [ ] Calculate the maximum safe dose: lidocaine 1% plain 3 mg/kg.
- [ ] Explain the procedure, expected discomfort and risks (incomplete block, infection, conversion of closed to open fracture, toxicity, haematoma), and obtain consent.

Before · Preparation

- [ ] Give interim oral or IV analgesia.
- [ ] Site IV access (or have it immediately available) and attach monitoring.
- [ ] **Confirm 20% lipid emulsion and resuscitation equipment are available before injecting.**
- [ ] **Check the side with the patient and the X-ray immediately before needle insertion.**
- [ ] Position the patient supine or sitting with the forearm supported and pronated, wrist exposed.
- [ ] Draw up lidocaine 1% plain only, check the label and the volume, and record the dose.

During · Identifying the site

- [ ] Palpate the dorsum of the distal radius and identify the fracture site, using the X-ray to locate the fracture line.
- [ ] Mark the entry point on the dorsal surface over the fracture haematoma, avoiding visible veins and tendons.

During · Asepsis

- [ ] Clean the skin widely with antiseptic and allow it to dry.
- [ ] **Use sterile gloves and a no-touch technique; place a drape.**
  A closed fracture must not be converted into an infected open fracture.

During · Needle insertion and confirmation

- [ ] Insert the needle through the dorsal skin into the fracture haematoma.
- [ ] Aspirate: free blood in the syringe confirms the needle is in the fracture haematoma.
- [ ] **Do not inject if blood cannot be aspirated and the position is not confirmed.**
- [ ] **Aspirate again before each injection of the dose; if the needle has moved, confirm the haematoma again before injecting.**
  Blood returning confirms the haematoma; avoid injecting into a vein or into soft tissue away from the fracture.

During · Injection

- [ ] **Inject the lidocaine slowly into the haematoma, with intermittent aspiration.**
  Typical volume 5–10 mL; never exceed the calculated maximum for the patient's weight.
- [ ] Consider infiltrating around the ulnar styloid if the ulna is also fractured.
- [ ] Withdraw the needle, apply a dressing and avoid massaging the area.

During · Waiting and testing

- [ ] Wait for the block to take effect before manipulating.
- [ ] Watch the patient throughout for early signs of local anaesthetic 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.**
- [ ] Proceed to manipulation only when the pain is controlled, and stop if the patient reports severe pain.
- [ ] Perform the reduction and apply a backslab or cast per local technique.

After · Post-reduction

- [ ] Recheck and document neurovascular status after reduction and immobilisation, with elevation of the arm.
- [ ] Obtain post-reduction X-rays and confirm the position acceptable to the orthopaedic team; refer if not acceptable.
- [ ] Monitor the patient for at least 30 minutes after injection for delayed signs of toxicity.

After · Discharge and follow-up

- [ ] **Give written advice on elevation, finger movement, plaster care, and when to return (increasing pain, numbness, swollen or discoloured fingers, tight cast).**
- [ ] Prescribe analgesia for when the block wears off.
- [ ] Arrange fracture-clinic follow-up per local protocol.
- [ ] Document the indication, consent, side check, site, aspiration, drug, concentration, volume, total dose, response, complications and neurovascular status before and after.

A procedure checklist. Perform procedures only within your training, competence and local policy. It does not replace your clinical judgement.
EM Orbit · Emergency medicine, in one orbit · proc-haematoma-block · red rows are the steps that must not be missed