

#### GUIDELINE

### Median Nerve Block

Scope (Staff):	All Emergency Department Clinicians	
Scope (Area):	Emergency Department	

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# **Median Nerve Block**

# **Pre-Procedure**

A median nerve block uses local anaesthetic to block the nerve at the wrist, allowing procedures on the radial side of the palm, palmar surface and tip of the thumb, index and middle finger and (variably) the ring finger.

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- Patient Suitability:
  - Patient able to cooperate with injections and for the procedure intended
- A clear explanation of the procedure needs to be provided to the patient
- Risks to be explained:
  - $\circ\,$  Pain as the injection is made
  - Nerve block might not work
  - $\,\circ\,$  Bruising and bleeding at the site of injection
- Formal consent is not required but procedure should be clearly documented
- Ensure the patient is in the appropriate treatment area

#### Indications

- Suitable for use in injuries requiring procedures on the radial side of palm, palmar surface and tip of the thumb, index, middle and ring fingers where treatment of duration less than 30 45 minutes such as:
  - Finger or hand lacerations requiring suturing

- $\circ\,$  Removal of foreign body from palm or medial fingertips
- $\,\circ\,$  Part of a hand block (with radial and ulnar nerve blocks)
- Not suitable for joint or fracture manipulation without doing a radial nerve block as well

# Preparation

### Equipment

- Dressing pack with antiseptic (Chlorhexidene or similar)
- 5ml syringe filled with lignocaine 1% or 2% (with or without adrenaline)
  Maximum dose of lignocaine is 3 mg/kg
- Warm lignocaine to body temperature (i.e. in your hand) to reduce discomfort
- 25G needle (orange) for the injection
- Consider EMLA® application over injection site
- Consider Nitrous Oxide for sedation whilst injections are occurring

# Procedure

#### Positioning and technique

- Position patient with palm held upwards and slightly flexed
- Drape wrist appropriately and prepare with aseptic technique
- Inject site 1-2 cm proximal to the proximal wrist crease with the needle vertical just radial to the palmaris longus tendon or the midline (ulnar side of flexor carpi radialis) if the tendon is absent (palmaris longus is absent in up to 14% of the population)
- Advance the needle until there is no resistance
- Aspirate the needle to ensure that it is not in a blood vessel
- If parasthesia is felt **do not** inject (this indicates that the needle lies within the nerve and will cause damage)
- Inject 2-3 ml of lignocaine **slowly** (should be easy to inject if in the right place)
- Allow up to 10 minutes for the block to become effective. If the area still has some sensation, a repeat injection can improve the effect (after another 5-10 minutes).

### **Post-Procedure**

### More

### Tags

anaesthesia, analgesia, block, crush, finger, fracture, hand, injury, laceration, lignocaine, local, nerve, regional, thumb, wrist

#### References

PMH ED Guideline: Median Nerve Block. Last updated January 2015

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