



<b>GUIDELINE</b>	
<b>Ulnar Nerve Block</b>	
<b>Scope (Staff):</b>	All Emergency Department Clinicians
<b>Scope (Area):</b>	Emergency Department

This document should be read in conjunction with this **DISCLAIMER**  
<http://kidshealthwa.com/about/disclaimer/>

# Ulnar Nerve Block

## Background

An ulnar nerve block uses local anaesthetic to block the nerve at the wrist, allowing procedures on the ulnar side of the hand and in the 5th finger (grey area on diagram).



Distribution of the Ulnar Nerve in the hand

## Indications

- Suitable for use in injuries requiring procedures on the 5th finger and/or ulnar side of hand (i.e. over the 5th metacarpal) with treatment of duration less than 30- 45 minutes such as:
  - Finger or hand lacerations requiring suturing
  - Manipulation of phalangeal fractures or interphalangeal joint dislocations
  - Manipulation of 5th metacarpal fractures
  
- Patient Suitability:
  - Patient able to cooperate with injections and for the procedure intended
  - Formal consent not required but procedure should be clearly documented
  
- Risks explained:
  - pain as the injection is made
  - nerve block might not work
  - bruising and bleeding at the site of injection

## Preparation

### Equipment

- Dressing pack with antiseptic (Chlorhexidine or similar)
- 5ml syringe filled with lignocaine 1% or 2% (with or without adrenaline)
- Note: **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

- Patient positioned with palm held upwards and slightly flexed with wrist appropriately draped and prepared with aseptic technique
- Identify the flexor carpi ulnaris tendon (the ulnar nerve runs immediately underneath this tendon)
- An injection is made 1-2 cm proximal to the proximal wrist crease with the needle horizontal (i.e. coming from the ulnar side and aiming towards the radius), aiming to infiltrate lignocaine a few millimetres beneath the carpi ulnaris tendon
- The needle is aspirated to ensure that it is not in a vessel
- If parasthesia is felt, then **do not** inject as this indicates that the needle lies within the nerve and will damage it
- 2-3 ml of lignocaine is injected slowly and should inject easily 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).
- It may be necessary to inject 2-3 mls of lignocaine subcutaneously around the ulnar styloid to block the dorsal sensory branch of the nerve which may not have been blocked with the initial injection (branches off just above wrist, so hopefully blocked with first injection).

This document can be made available in alternative formats on request for a person with a disability.

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