



## GUIDELINE

### Digital Nerve Block

<b>Scope (Staff):</b>	All Emergency Department Clinicians
<b>Scope (Area):</b>	Emergency Department

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<http://kidshealthwa.com/about/disclaimer/>

# Digital Nerve Block

## Pre-Procedure

- A digital nerve block is used to anaesthetise a finger, thumb or toe for a procedure. It requires injection of local anaesthetic to interrupt nerve signals travelling back from the digit.

## Requirements:

- The patient needs to be able to cooperate with injections, and hold still for the procedure intended
- Formal consent is not required but the procedure should be clearly documented
- A clear explanation of the procedure needs to be provided to the patient
- Risks need to be explained:
  - Pain as the injection is made
  - Digital nerve block might not work
  - Bruising and bleeding at the site of injection

## Indications

- Finger or toe injuries requiring treatment that will take less than about 30-45 minutes e.g. finger lacerations requiring suturing
- Manipulation of phalangeal fractures or interphalangeal joint dislocations
- Nail bed injuries requiring exploration or repair

## Preparation

### Equipment

- Dressing pack with antiseptic (Chlorhexidene or similar)
- 5ml syringe filled with lignocaine 1% or 2% (**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

- Ensure the patient is in the appropriate treatment area
- Position the patient lying on a bed with their hand or foot appropriately draped and prepare with aseptic technique
- Injections will be through the dorsal surface of the finger just distal to the MCPJ
  - Insert the needle on the side of the finger into the dermis
  - Advance the needle nearly to the palmar surface of the finger
  - Aspirate the needle to confirm that it is not in a blood vessel
  - Inject approximately 1mL of anaesthetic solution (enough to make the skin slightly bulge) as the needle is slowly withdrawn
  - Repeat on the other side of the finger
- It is then important to wait several minutes (up to 10 minutes) for the block to become effective. If the digit still has some sensation, it is possible to repeat the injections to improve the effect (and wait for another 5-10 minutes).

## Post-Procedure

## More

### Tags


anaesthesia, analgesia, block, crush, digital, finger, fracture, injury, lignocaine, local, nerve, regional, ring, thumb, toe

## References

PMH ED Guideline: Digital Nerve Block. Last Updated January 2015

- Baldor R, and Mathes B (2014) Digital Nerve Block. *UpToDate*. Accessed at [www.uptodate.com](http://www.uptodate.com)

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