

DIGITAL NERVE BLOCK

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Digital nerve blockade is simple and easy to perform and provides useful analgesia for a variety of minor surgical procedures. The technique is essentially the same for fingers and toes.

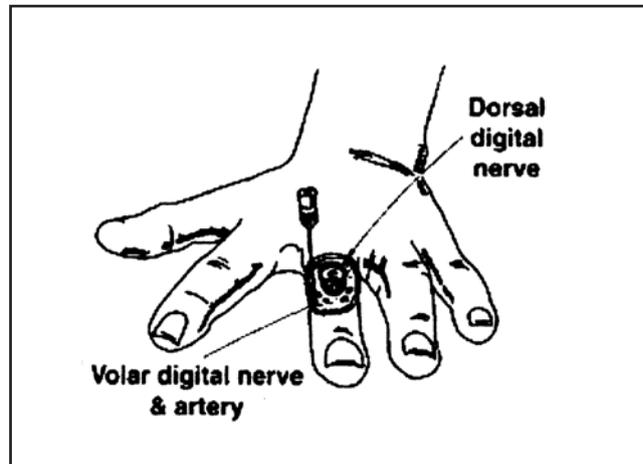
Anatomy

In the hand, the common digital nerves are derived from the median and ulnar nerves and divide in the distal palm into paired volar (or palmar) branches. These run with the digital vessels on either side of the flexor tendon sheath of each finger and supply the lateral and palmar aspect of each finger together with the tip and nail bed area. The smaller dorsal digital nerves, derived from the radial and ulnar nerves, run on the dorsolateral aspect of each finger and supply sensation to the back of the finger.

In the foot, the digital nerves are the terminal branches of the tibial and peroneal nerves which, in their turn, are branches of the sciatic nerve.

Method

The patient's hand is placed palm down and the skin cleaned. A 25g needle is inserted into the dorsal aspect of the web space between the fingers as proximally as possible and close to the phalanx (figure). The needle is advanced through the tissues until just below the skin on the palmar side.



After aspirating to ensure that a vessel has not been entered, 1-2ml of local anaesthetic is injected to block the volar branch and, as the needle is withdrawn, a further 0.5-1 ml is injected to block the dorsal branch. The nerves on the radial aspect of the thumb are best blocked by a subcutaneous wheal of local anaesthetic injected at its base.

Either 1% plain lignocaine or 0.5% plain bupivacaine (or other equivalent agent) can be used. On no account should adrenaline-containing solutions be used. The digital arteries are end arteries and ischaemia or necrosis can occur if adrenaline is injected.

The anatomy of the digital nerves in the foot is similar and a similar technique can be used to block them.
