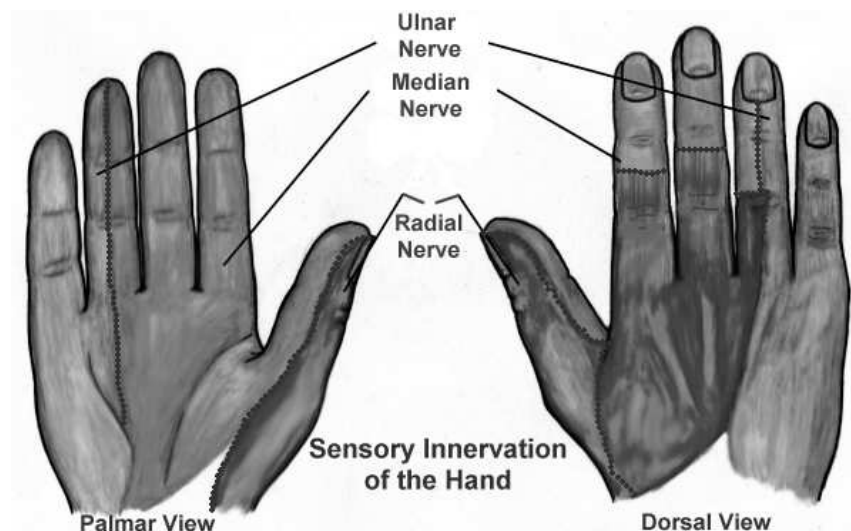


Wrist Block

CoreNotes by Core Concepts Anesthesia Review, LLC

What You Must Know

1. Wrist block can provide profound sensory, but not motor, anesthesia to the hand.
2. 3 nerves supply innervation to the hand: ulnar, median & radial nerves.
3. Epinephrine is NOT included in nerve blocks below the elbow.
4. The median nerve supplies motor innervation to the lumbricals of the 1st and 2nd fingers and to the muscles of the thenar eminence.
5. The ulnar nerve supplies motor innervation to all of the other intrinsic hand muscles.
6. The radial nerve has only sensory function at the level of the wrist.
7. a. The radial nerve is blocked as a field block through injection of a subcutaneous ring from the radial flexor muscle of the wrist to the ulnar styloid.
b. The median nerve is blocked by injecting anesthetic between the flexor carpi radialis and palmaris longus tendons.
c. The ulnar nerve is blocked by injecting anesthetic between the ulnar artery and the flexor carpi ulnaris tendon.



Blocks of the 3 nerves at the wrist can supply total sensory anesthesia of the hand. Since much of the movement of the hand is a result of muscles in the forearm, this block is not effective in producing a motor block of the hand. However, anesthesia of the innervation of the intrinsic muscles of the hand is accomplished and can be used to assess the effectiveness of the block. Epinephrine containing solutions should be avoided in any block distal to the elbow as it may cause severe vasoconstriction of the small vessels of the wrist, hand and/or fingers resulting in ischemic injury.

Additional Reading:

Nagelhout, JJ, and Zaglaniczny, KL. *Nurse Anesthesia*. St. Louis: Elsevier, 2013:1115-1116