

### Carpal Sheath

**Quantity of Local Anesthetic:** 15 to 30 mL

**Needle Size:** 1-1/2 to 3-1/2 inches, 20 to 22 gauge

**Injection Techniques:** The carpal synovial sheath enclosing the digital flexor tendons extends from a level 8 to 10 cm proximal to the radiocarpal joint distally to near the middle of the metacarpus on the medial aspect of the carpus. If distended, the sheath is easiest to access medially anywhere along its course using a 1-1/2-inch, 20-gauge needle. If non-distended, a lateral approach 3.5 cm proximal to the distal radial physis between the tendons of the lateral digital extensor and ulnaris lateralis muscles with the carpus flexed is recommended. A 3-1/2-inch, 20-gauge spinal needle is directed distomedially from this location to contact the caudal aspect of the radius.

**Pitfalls:**

1. Inability to aspirate fluid if no sheath effusion
2. Directing needle too superficially from lateral aspect of limb and not entering the carpal sheath