

Radiocarpal Joint

Quantity of Local Anesthetic: 8 to 10 mL

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

Injection Techniques:

- **Dorsal approach (Figure 3.84A):** The site of injection for the radiocarpal joint is located in palpable depressions lateral or medial to the extensor carpi radialis tendon on the dorsal

aspect of the carpus. The injection is made with a 1-inch, 20- or 22-gauge needle midway between the distal radius and proximal row of carpal bones.

- **Palmarolateral approach (Figure 3.84B):** The landmarks for the palmarolateral approach to the radiocarpal joint are the palmarolateral aspect of the radius, proximolateral aspect of the accessory carpal bone, and palmarolateral aspect of the ulnar carpal bone. A 1-inch, 20-gauge needle is inserted in this palpable depression at 90° to the long axis of the limb and the needle is directed dorsomedially. Another palmarolateral approach is at the midaccessory carpal bone level in a palpable “V” between the tendons of the ulnaris lateralis and the lateral digital extensor. The needle is inserted perpendicular to the skin in a small depression 1/2 to 1 inch distal to the “V” in the space between the distal lateral aspect of the radius (vestigial ulna) and the proximal lateral aspect of the ulnar carpal bone.

Pitfalls:

1. Placing the needle too distally when using the palmar approach
2. Inability to palpate the palmar pouch of the radiocarpal joint
3. Damaging the articular cartilage using the dorsal approach