

## Middle Carpal 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 3.83A):** The site of injection for the middle carpal joints 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 proximal and distal rows of the carpal bones. Because the surfaces of the carpal bones are at an angle, the needle should be directed slightly proximally to avoid hitting the articular cartilage.
- **Palmarolateral approach (Figure 3.83B):** The palmarolateral approach to the middle carpal joint is best used if the joint is distended. With distension the joint capsule is superficial and protrudes palmar and lateral to the ulnar and fourth carpal bones distal to the accessory carpal bone. The injection site is approximately 1 inch distal to the site of injection of

the radiocarpal joint. A 1-inch 20-gauge needle is inserted perpendicular to the skin to a depth of about 1/2 inch.

### **Pitfalls:**

1. Placing the needle too distally when using the palmar approach
2. Inability to palpate the palmar pouch of the middle carpal joint
3. Anesthetizing the proximal metacarpal region with a middle carpal joint block
4. Damaging the articular cartilage using the dorsal approach

