Proximal Interphalangeal Joint

Quantity of Local Anesthetic: 3 to 5 mL
Needle Size: 1 to 1-1/2 inches, 20 or 22 gauge
Injection Techniques:

- Dorsolateral approach (Figure 3.77): The dorsolateral approach can be done while the horse is standing or with the limb extended and the sole supported on the knee. The condylar eminences of the distolateral aspect of the first phalanx (P1) are identified and a 1-1/2-inch, 20-gauge needle is inserted parallel to the ground surface 1/2 inch distal to the palpable eminence. The needle is directed underneath the edge of the extensor tendon dorsal to the collateral ligament to enter the joint at a depth of 1/2 inch.
- Palmar/plantar approach (Figure 3.78): The palmaro/plantaroproximal approach is best performed with the distal limb in a flexed position. A 1-1/2-inch, 20-gauge needle is inserted perpendicular to the limb into the palpable V-depression formed by the palmar aspect of P1 dorsally, the distal eminence of P1 distally, and the lateral branch of the SDFT as it inserts on the eminence of P2 palmarodistally. This corresponds to the transverse bony prominence on the proximopalmar/plantar border of P2 that is usually easily palpable. The author prefers to angle the needle slightly dorsally to contact P1, and then direct the needle along the palmar/plantar aspect of the bone. This ensures that the needle is just behind P1, where it will enter the PIP joint capsule at a depth of approximately 1 inch.

Pitfalls:

1. No easily palpable joint pouches because of extensor tendon dorsally and the ligaments/tendons on the palmar/plantar aspect
2. Difficulty to “feel” the needle penetrate the joint space dorsally
3. Placing the needle too distally when using the palmar/plantar approach
4. Injecting the digital flexor tendon sheath when using the palmar/plantar approach