

Bicipital Bursa

Quantity of Local Anesthetic: 20 to 30 mL

Needle Size: 1-1/2 to 3-1/2 inches, 18 to 20 gauge

Injection Techniques:

- **Distal approach (Figure 3.104A):** The cranial prominence of the lateral tuberosity of the humerus is used as the landmark as was done for the shoulder joint. The site of injection is 2-1/2 inches distal and 3 inches caudal to this prominence. A 3-1/2-inch, 18- to 20-gauge spinal needle is directed proximomedially toward the intertuberal groove until it contacts the humerus. The depth of the needle depends on the size of the horse, but a 3-1/2-inch spinal needle usually is inserted to the hub in most mature horses. Alternatively, the deltoid tuberosity of the humerus can be palpated and used as a landmark. The needle is inserted 1-1/2 inches proximal to the distal aspect of the deltoid tuberosity and directed proximomedially (toward to opposite ear) to a depth of 2 to 3 inches.

Proximal approach (Figure 3.104B): The proximal approach is performed in the intertuberal groove, which can be palpated medial to the edge of the cranial prominence of the lateral tuberosity of the humerus. A 1-1/2-inch, 20-gauge needle is inserted into the intertuberal groove in a plane parallel to the bearing surface of the foot at about a 45° angle to the sagittal axis of the horse until the needle strikes cartilage. The primary advantages of the proximal approach compared to the distal approach are a slightly improved accuracy of entering the bursa and not needing a 3-1/2-inch spinal needle.

Pitfalls:

1. Needle directed too superficially and does not enter bursa
2. Inability to aspirate synovial fluid—not uncommon
3. Difficulty palpating the deltoid tuberosity to determine correct needle placement