

Shoulder Joint

Quantity of Local Anesthetic: 30 to 40 mL

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

Injection Techniques:

- Craniolateral approach (Figure 3.88): All approaches to the shoulder are performed with the horse standing. The site for the craniolateral approach to the shoulder joint is located in the notch formed between the cranial and caudal prominences of the lateral tuberosity of the humerus. The caudal prominence (point of the shoulder) is easiest to

palpate; by exerting deep finger pressure the depression for needle insertion can be palpated 3 to 4 cm cranial to the caudal prominence. This notch is not as readily palpable in heavily muscled horses. A 3-1/2-inch, 18- 20-gauge spinal needle is inserted into this notch and directed parallel to the ground in a caudomedial direction toward the opposite elbow. The depth of penetration depends on the size of the horse, but the joint capsule is usually entered at a depth of 2 to 3 inches. Synovial fluid usually can be aspirated and is the only definitive method to document correct needle placement.

Alternatively, the spinal needle may be inserted slightly more proximal on the limb in a distinct depression located cranial to the infraspinatus tendon and slightly proximal

and cranial to the point of the shoulder. The needle is placed parallel to the ground or slightly downward and directed caudomedially at a 45° angle until bone is contacted.

- Lateral approach: The landmarks for the lateral approach to the shoulder are the lateral humeral tuberosity and the infraspinatus tendon. A 3-1/2-inch, 18- to 20-gauge spinal needle is inserted 1 to 2 cm caudal and distal to the infraspinatus tendon in line with the lateral humeral tuberosity. The needle is

directed slightly caudally and upward toward the lateral aspect of the humeral head. In general, this approach is more difficult than the craniolateral approach.

Pitfalls:

1. Needle directed too proximal and hits the glenoid of scapula
2. Needle directed too medial to lateral and diverges across the humeral tuberosity
3. Inadvertent anesthesia of the bicipital bursa; communicates with the shoulder joint in some horses
4. Inability to aspirate synovial fluid