

## *Tendon Sheath Anesthesia*

### **Digital Flexor Tendon Sheath (DFTS)**

**Quantity of Local Anesthetic:** 10 to 15 mL

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

#### **Injection Techniques:**

- Proximal approach (**Figure 3.97**): The site for injection of the proximal pouch of the DFTS is 1 cm proximal to the palmar/plantar annular ligament and 1 cm palmar/plantar to the lateral branch of the suspensory ligament. A 1- to 1-1/2-inch, 20-gauge needle is directed slightly distally until the sheath is penetrated.
- Distal approach (**Figure 3.98**): The distal outpouching of the DFTS in the pastern region is often palpable as a distinct “bubble” when effusion is present. It is located between the proximal and distal digital annular ligaments and between the diverging branches of the SDFT where the DDFT lies close to the skin. A 1-inch, 20-gauge needle is directed in a lateral to medial direction just beneath the skin so as not to penetrate the DDFT.
- Axial sesamoidean approach (**Figure 3.99**): The axial sesamoidean approach at the level of the fetlock and the medial or lateral approach between the annular ligament and proximal digital annular ligament can be performed in the distended and non-distended

DFTS. Both approaches are best performed with the limb held with the fetlock slightly flexed. The axial sesamoidean approach is performed 3 mm axial to the palpable border of the midbody of the lateral proximal sesamoid bone using a 1- to 1-1/2-inch, 20-gauge needle. The needle is directed at a 45° angle to the sagittal plane to a depth of approximately 1.5 to 2 cm. Alternatively, the needle can be inserted into the outpouching of the DFTS abaxial and distal to the sesamoid bones between the annular and proximal digital annular ligaments. The needle is inserted in a distal to proximal direction at approximately a 45° angle to the sagittal plane (**Figure 3.98**).

#### **Pitfalls:**

- . Difficulty in palpating the proximal pouch of the DFTS when non-distended
- . Inability to aspirate fluid—needle against tendons
- . Contacting bone with the axial sesamoidean approach—needle inserted too far abaxially