Common sites for Joint Block

Anaesthetic	Onset time	Duration time
Lidocaine	< 10 mins	1- 1 ½ hours
Mepivacaine	< 10mins	2- 3 hours
Bupivacaine	>10 mins	3- 8 hours

Table 1: Anaesthetic drugs onset and duration time.

Mepivacaine is the preferred local anaesthetic, since it is less irritating and has a more rapid onset.

Skin Preparation

1. Clip the hair around the injection site area.
2. Minimum of 5 minute sterile scrub of the site using an antiseptic and alcohol or saline.

Technique	Quantity (Q) of the local Anaesthetic Needle size	Injection Technique	Disadvantages
Distal Interphalangeal (DIP) /Coffin joint	Q: 4-6ml NS 1- 1 ½ inches, 20- 22 gauge	**Dorsolateral Approach:** Performed when standing. The site of injection is 1/2 inch above the coronary band and 3/4 to 1 inch lateral to midline. The needle is inserted from a vertical position and directed distally and medially toward the center of the foot at approximately a 45 ° angle. The needle should enter the DIP joint capsule at the edge of the extensor process. **Dorsal parallel or perpendicular approaches:** The injection site is just above the coronary band, 1/4 to 1/2 inch above the edge of the hoof wall on the dorsal midline of the foot. **Lateral Approach:** The site for injection for the lateral approach is bounded distally by a depression along the proximal border of the collateral cartilage approximately midway between the dorsal and palmar/ plantar border of P2.	Using more than 6ml of anaesthetic and blocking the palmar /plantar digital nerves. Interpreting a +ve DIP joint block as only a coffin joint problem. Entering the digital flexor tendon sheath when using the lateral approach. Contacting bone due to incorrect angle of the needle with the dorsolateral approach.
Metacarpo/ Metatarsophalan geal (MC/MTP; Fetlock) Joint	Q: 8-12 ml NS: 1-1 ½ inches: 20 or 22 gauge.	**Proximal palmar/plantar pouch:** The boundaries of the palmar/plantar pouches of the fetlock joint are the apical border of the proximal sesamoid bones distally, the distal ends of the splint bones proximally, the third metacarpal/metatarsal bone dorsally, and the branch of the suspensory ligament palmar/plantarly. **Collateral sesamoidean approach:** The fetlock is flexed to increase the space between the articular surfaces of the proximal sesamoid bones and the back of the metacarpus/metatarsus. The depression between the bones is palpated and a needle inserted through the collateral sesamoidean ligament perpendicular to the limb.	Blood contamination and inability to aspirate synovial fluid with the proximal palmar/ plantar approach Contacting bone when using the collateral sesamoidean approach Incorrect needle angle when using the distal palmar/plantar approach Damaging the articular surfaces with the dorsal approach

		Distal palmar/plantar approach: Landmarks are the distal aspect of the proximal sesamoid bone and collateral sesamoidean ligament proximally; the proximal palmar/plantar eminence of P1 distally; and the digital vein, artery, and nerve palmar/plantarly. The needle is inserted in the depression and directed slightly dorsally and proximally until the joint is entered. **Dorsal approach:** Limb bearing weight. The needle is inserted proximal to the proximodorsal limits of P1 in the palpable joint space in a slightly oblique manner, either lateral or medial to the extensor tendon.	
Digital Flexor Tendon Sheath (DFTS)	Q: 10 -15ml NS: 1 – 1 ½ inches, 20-22 gauge.	**Proximal Approach:** Injection site is 1 cm proximal to the palmar/plantar annular ligament and 1 cm palmar/plantar to the lateral branch of the suspensory ligament. The needle is directed slightly distally until the sheath is penetrated. **Distal Approach:** Injection site 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. The needle is directed in a lateral to medial direction just beneath the skin so as not to penetrate the DDFT. **Axial sesamoidean approach:** Is performed 3 mm axial to the palpable border of the mid-body of the lateral proximal sesamoid bone using a needle. The needle is directed at a 45 °angle to the sagittal plane to a depth of approximately 1.5 to 2 cm.	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