**Instruments:**

Contraindications for nerve blocks done with severe lameness suspected to be a fracture:

• cellulitis

• moderate soft tissue swelling or a local wound

The most common complications associated with diagnostic nerve blocks:

• swelling at the site of injection, either in response to the substance or due to haematoma formation.

• infection of the tissue (perineural), infection of the synovial structure (intrasynovial), peripheral neuropathy (cubital and shoulder joint anaesthesia) and bent or broken needles. (RARE)

**Preparation:**

• Cleaning the coat and skin with surgical scrub and then alcohol is enough in most instances

• Clip and clean skin of hairy (ask the owner’s permission first) or mud-caked horses with surgical scrub

• Perform aseptic preparation if there is a risk of inadvertently penetrating a synovial cavity, e.g. local analgesia of the palmar metacarpal nerves just distal to the carpus (part of high 4-point nerve block)

Assessment:

• Wait 5-10min before assessment (at least 20min for proximal limb techniques)

• Loss of skin sensation frequently used; use a blunt instrument such as a biro to test or window-opening pole for safety (especially in hindlimbs)

• 75% improvement in lameness probably indicates a single source of pain; less improvement with severe lameness and local infection, e.g. subsolar abscess, or if there is an additional, more proximal source of pain

• Desensitisation lasts for at least 120min – this is relevant when investigating horses with multiple limb lameness

Technique:

• Work in a distal to proximal sequence to localise the source of pain most accurately

• Not well tolerated by all horses

A twitch or holding up the ipsilateral forelimb (when appropriate) may be helpful

In some horses it is necessary to use chemical restraint, e.g. a low dose of an alpha-2 agonist (0.2mg/kg xylazine),

acepromazine (10-15mg total dose), combination of alpha-2 agonist and butorphanol.

Ref link: 