

Perineural Anaesthesia:

General

Deposition of local anaesthetics into synovial structures and perineurally is commonly employed to specifically identify the region(s) causing pain in the lame limb. Perineural anaesthesia also is frequently used to facilitate surgical procedures and reduce postoperative pain.

Skin Preparation

Most perineural blocks do not require an antiseptic skin preparation. The only skin preparation necessary for most sites of regional anaesthesia is scrubbing/wiping the area with 4×4 gauze soaked in alcohol until clean.

Exceptions to this

include the low palmar (four-point) block, the high palmar (four-point) block, the lateral palmar block, and the high plantar (four-point) block. These sites have the potential to enter synovial cavities; therefore, an antiseptic skin preparation should be performed.

Restraint

The type of physical restraint depends on the disposition of the horse and the skill of the veterinarian. Most blocks are performed out of the stocks, but in selected instances stocks can be helpful. When performing local anaesthesia, the horse should be haltered and restrained by an attendant who is standing on the same side of the horse. Most perineural blocks of the distal limb can be performed with minimal restraint, depending on the nature of the horse. However, twitch restraint is often very helpful, especially with the more proximal blocks. When using local anaesthesia in the hind limb, the practitioner should always be in a position so that minimal bodily harm will result if rapid movement occurs.

Tip

To avoid broken or bent needles during perineural administration of local anesthetic solution, the needle should always be inserted detached from the syringe. Spinal needles are flexible and more likely to bend than break and, thus, safer to use if there is a possibility the horse may move the limb. Using a flexible needle is especially important when the difference in range of movement between skin and deeper tissues is large, in case the horse moves during injection. Luer-lock syringes should not be used because they are difficult to attach to the needle after it is inserted, and this type of syringe cannot be detached quickly from the needle to prevent the needle from being pulled out, bent, or broken if the horse moves during the procedure. The needle should be directed distally during insertion when anesthetizing nerves in the distal portion of the limb. Directing the needle proximally may result in proximal migration of anesthetic solution and unintended anesthesia of more proximal branches of the nerve, thus confusing the results of the examination.