

Client Factsheet #2: Lameness Investigation

What is a lameness investigation?

“Lameness investigation” is the step-by-step process of working out, in a lame horse, where the source of the pain is. Sometimes this can be obvious. For example with a solar abscess or laminitis, it is usually clear that the pain is in the foot. Unfortunately, many sources of lameness are not so straightforward to identify. This is where a logical, step-by-step process is needed to rule out different areas of the leg as the cause of the lameness. Frequently the investigation can be performed on the yard, so you can observe what is happening. However, for subtle or multiple limb lameness, it may be preferable to bring the horse into the hospital for investigation. In this case, you are welcome to remain with your horse while the lameness investigation is carried out, but it can be a long process and you might prefer to drop the horse off and collect them later in the day.

How does a lameness investigation work?

Your vet will start by asking for a thorough history of the lameness. They will want to know when it started, how it progressed, whether the horse has received any treatment (e.g. Bute) and whether the lameness has changed at all since it first began. They will then watch the horse walk, and trot, in a straight line and on the lunge, on a hard surface and a soft surface. Flexion tests may be performed. Assessing the way your horse’s action changes with these different challenges provides clues as to the nature and location of the pain. Your vet will then palpate and manipulate the horse, i.e. run their hands over the whole horse, looking for signs of inflammation (heat, redness, swelling, pain) or muscle atrophy, filling of the joint or thickened areas of tendons. All of this helps target the likely areas where the pain arises. Your vet will then proceed to nerve blocks.

What is a nerve block?

A nerve block, or more properly perineural analgesia, is when a small amount of local anaesthetic is injected next to a nerve. This desensitizes the nerve for a short period of time. Once the nerve is desensitized, the area below (distal) to the nerve will not feel any pain until the anaesthetic wears off. This means that if the source of the pain is distal to the desensitized nerve, your horse will become sound while the local anaesthetic is taking effect. Nerve blocks are used in a progression starting from the foot and moving up the leg (proximally) so that the source of the pain can be pinpointed as accurately as possible. For example, if the nerves either side of the fetlock are anaesthetized, and the horse is still lame, but when the nerves either side of the cannon bone are anaesthetized, the horse becomes sound, this pinpoints the source of the pain to being between the fetlock and the cannon bone. Sometimes local anaesthetic is injected directly into a joint, to diagnose whether the joint itself is the source of the pain.

Radiographs and ultrasound scans of the pinpointed area can then be used to diagnose the source and the cause of the lameness, which can then be treated as necessary.