



Unfortunately, lameness in horses is very common and it is one of the most likely reasons that a horse will require veterinary attention. As a horse owner you can help in the evaluation of your horse's problem by being observant and by keeping good records.

What is a lameness examination?

A vet carrying out a lameness examination will aim to assess your horse for lameness, determine the cause of lameness and recommend treatment.

A lameness examination is generally composed of four parts:

- History
- Observation
- Manipulation
- Diagnostics

How can I help?

History

A history should include information about the horse such as sex, age and use. Any past problems or current situations that might have influenced the present lameness should be included. Questions your veterinarian may ask you can include:

- Has the problem occurred quickly or over a longer time period?
- Was the horse turned out in a field or in the stall when the problem first occurred?
- Was the horse in work when the lameness was noted and, if so, what type and level of work was the horse doing?

Simple answers to these questions will be extremely helpful to your veterinarian in determining the cause of lameness and its eventual treatment.

What will my vet do?

Observation

Observation of the natural stance and motion of the lame horse is the next step. Again, any information you can provide your vet will be very useful. The following questions may be asked:

- Is the horse willing to place weight on the affected leg?
- Does it stand normally?
- Is it unwilling to lift up a certain hoof or to move in a certain way?
- When it walks does it advance the limbs normally, does it fully and evenly put weight on its feet and does it turn easily in both directions?
- Is it lame at walk, trot or canter?

Your vet will observe the horse at rest from all four sides, either in the stable or outside. This allows scrutiny of the horse's conformation, stance, muscle symmetry and the presence of any 'lumps and bumps'.

Your vet will then observe your horse as it walks, and trots in a straight line. This evaluation is generally done on a hard, flat surface. Such a surface allows the observer to actually see the way that the feet make contact with the ground, and the hoof-beats provide an audible measure of weightbearing. When evaluating a lame horse your vet will look at the way that each leg moves through the air. Your vet will try to answer the following questions:

- Does the horse tend to carry one leg closer to, or away from, the centerline of its body?
- Are both hips even or does one hip raise or lower further than the other while the horse is moving?

The horse should then be observed while moving in a circle, usually on a lunge line. Here your vet will look for a head-nod or for a hip-hike as the horse moves, while these can be very helpful if observed, they are not the final answer as to site and cause of lameness.



Horses travel on four legs which complicates their motion and can make evaluation difficult. Repeat evaluations sometimes on separate days, and with additional opinion, may be necessary to clarify difficult cases. Video documentation of some cases is possible and may be useful.

What will happen next?

Manipulation

Manipulation of the muscles, ligaments and joints of the body will follow next. Heat, tenderness and any reduction in the normal range of motion of the joints should be checked for, and any abnormalities recorded. Palpation (physical manipulation which includes pressure on certain critical musculoskeletal areas) should be carried out to identify affected areas.

Flexion tests are important in equine lameness examinations and will be done at this point. In a flexion test the examiner seeks to compare the motion of the horse before and after stress is applied to particular areas of the body:

- The fetlocks, knees and hocks are each flexed for 45-60 sec. Only enough pressure is applied to stress but not strain the joint; this is a learned technique that takes practice.
- After flexion the horse is jogged off and the evaluator looks for uneven stride length, for lack of propulsion or for a reluctance to land and load a particular joint.
- The test is positive if the lameness clearly increases, or negative if it does not.

Will a diagnosis be made?

After the observation phase a diagnosis may be made or additional diagnostic work may be needed. Occasionally regional anaesthesia or localised nerve blocks will be done. Your vet will clean and prepare the skin over specific nerves. A local anaesthetic solution will then be injected into the nerve. The region of the body below the nerve that has been injected will be temporarily "numbed" and your horse will not feel pain coming from that region. By comparing the horse's motion before and after the injection, and by knowing the anatomical relationship between surface nerves and related structures, your vet can use this technique to pinpoint a specific lameness problem. Further local anaesthetic techniques include injection into joints or synovial sheaths.

Additional information from radiographs, ultrasound or thermography may also help in the final diagnosis. Subtle lamenesses and problems involving the neck, back and pelvis may require further study. Nuclear scintigraphy is another diagnostic modality that can provide information about these and other areas of the horse's body. In some complicated cases lameness may only be observed when the horse is performing, and high-speed treadmill evaluation may be necessary.

Conclusion

Lameness evaluation in the horse can be relatively simple or it can be very complex. A complete history and careful observation are the first steps. Manipulation and the application of any number of diagnostic tests will complete the examination and should reveal a description of the problem and allow the clinician to prescribe a treatment and rehabilitation plan that will be specific to your horse.

As you, the owner, are often the best evaluator of the horse's motion and behavior, careful observation and good record keeping will be helpful to a vet attempting to perform a lameness evaluation.

If you want any other information on health issues concerning your pet Vetstream advise you to contact your local veterinary practice.