

Figuring Out Your Horse's Lameness

By Mike Black, DVM
Nebraska Equine Veterinary Clinic
Omaha, NE

When your horse becomes lame, it can be a frustrating and challenging time. In order to correct the problem and to return to work, one must uncover the source of pain and implement a plan to alleviate it.

The process of discovering the specific cause of the lameness often requires detailed diagnostic tests. First, the horse should be visually examined in search of heat, swollen or enlarge areas or joints, and areas of soreness. Special attention should be placed on the condition of the feet. Are the feet balanced from the toe to the heel and from the inside to the outside? A large percentage of horses' feet are out of balance. When the horse walks, does its feet land flat, or do they land on the inside or outside quarter? They should also be tested for soreness with hoof testers which are instruments that place pressure on specific areas in the foot in search of sore spots.

Following the physical exam, one visually evaluates the horse in motion. It is best to watch the horse both walking and trotting on a hard surface such as asphalt. The surface is important because many subtle lamenesses are not visible on soft ground (such as sand or grass), but the lameness becomes apparent on harder surfaces. The horse is usually moved by both walking and trotting in a straight line and in a circle in both directions. This portion of the exam helps determine which leg or legs the horse is lame on.

Once you know which leg the horse is sore on, the focus of the exam is to determine where within that leg the pain originates. Flexion tests can help identify which region of the leg is painful. Flexion tests are a series of tests in which certain joints or regions in the leg are held in a flexed position for a period of time (eg, 30 seconds to 90 seconds), followed by trotting the horse off. If flexing the limb makes the lameness dramatically worse, then it is logical that the area stressed through flexing is sore.

Flexion tests are general in nature and help identify the region of the soreness, such as the upper leg or lower leg. More specific tests to locate pain are either regional nerve blocks or joint blocks. Nerve blocks are injections of local anesthetic (ie, lidocaine) into sensory nerves (ie, nerves that detect pain), temporarily disrupting the horse's ability to perceive pain. This process is usually started by numbing the heel region of the foot (ie, heel block). After the heel has been blocked or numbed, then the horse is again trotted. If this block eliminates the lameness, then one can assume the pain is coming from the heel. If there is no difference in the lameness, one proceeds further up the leg with more nerve blocks until the region of pain is located (see Figure 1).

In some instances the horse shows no improvement with regional nerve blocks. In these cases, it may require blocking specific joints to localize the source of pain. Joint blocks follow the same logic as nerve blocks where, again, local anesthetic is placed directly into specific joints and the horse is trotted to evaluate response. Once the area of pain has been established, we start to look at what could be the problem within that region.

This process usually involves some form of imaging, most commonly radiographs (x-rays) or ultrasound images. Once all this information has been gathered, a plan for recovery can be instituted to get your horse back to being ridden.

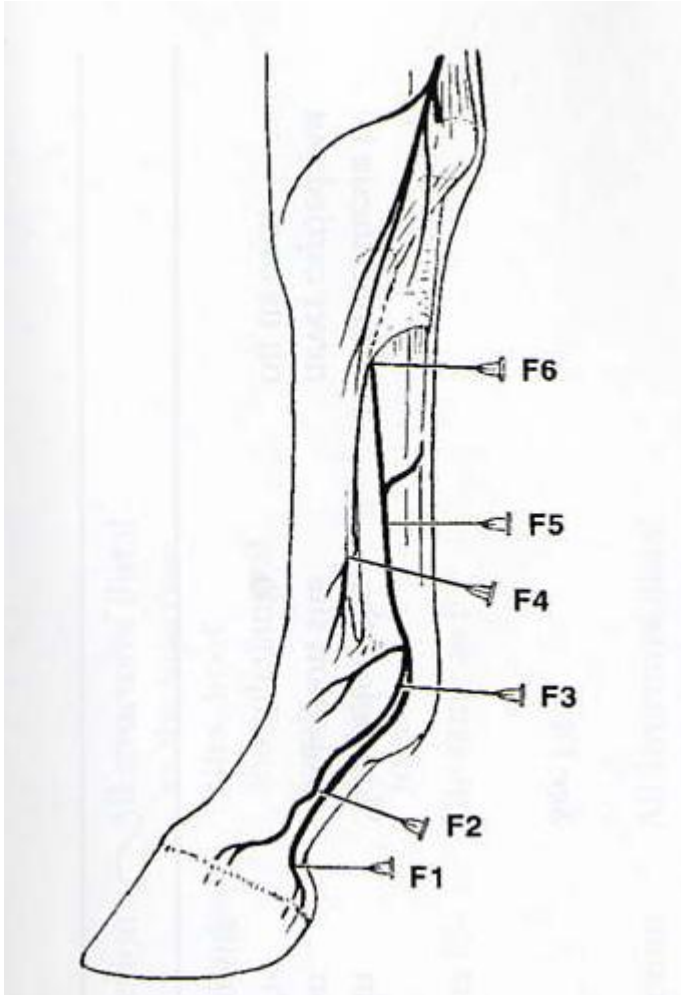


Figure 1: Sequence of Nerve Blocks