

LAMINITIS IN HORSES

What is laminitis?

Laminitis is inflammation of the lamina of the hoof. The lamina are the soft tissues that attach the coffin bone to the hoof capsule. As the lamina become inflamed during a laminitic episode the hoof capsule cannot expand to accommodate the swelling. This results in severe pain as well as a compromise of blood flow to the coffin bone. The combination of these factors results in the bond between the coffin bone and hoof to weaken. The deep digital flexor tendon runs along the back of the leg and attaches to the back of the coffin bone. The backward pull of this structure on the coffin bone then causes the bone to rotate downward and the weight of the horse can cause the bone to “sink” in the hoof. In severe cases, the coffin bone may even sink through the sole of the foot.

What causes laminitis?

There are many different causes for laminitis including fever, endotoxemia, grain overload, excessive weight bearing due to injury of another leg, excessive riding on hard ground and metabolic abnormalities (such as Cushing’s disease). Often times though, no specific cause can be cited.

What are the clinical signs of laminitis?

Laminitis is most often seen in the front feet although there are cases where the hind feet are involved. Early signs may be shifting weight back and forth from one foot to the other or just walking “stiff” or short-strided. Horses with laminitis often have a “walking on egg-shells” gait and in some more severe cases the horses will rock back on their hindend and throw themselves forward to walk. The characteristic stance for a horse with laminitis is forelimbs extended in front of them with the hind limbs tucked underneath. In advanced laminitis, many horses will lay down and be reluctant to get up and the pulses in their feet will be increased.

What is the treatment for laminitis?

If you suspect your horse has laminitis, contact your veterinarian immediately. In most cases the sooner treatment is instituted, the better the outcome. If the cause of the laminitic episode is known, it should be addressed and corrected if possible. Radiographs are very important in evaluating the severity of the disease, its progression and directing the appropriate treatment.

In an acute episode, the goal is to minimize pain, reduce inflammation and hopefully prevent rotation of the coffin bone. Placing the horse on soft bedding, putting styrofoam pads on the feet and administering a non-steroidal anti-inflammatory such as Bute are often indicated. Some people believe that in the very early stages of the disease it may be helpful to ice the feet. Repeat radiographs are helpful to assess effectiveness of treatment and progression of the disease.

Mechanical support of the foot is important. Therapeutic shoeing is often utilized in both acute and chronic cases in order to stabilize the foot and coffin bone. It also helps to promote proper weight bearing. Your veterinarian and farrier should work together to prescribe the proper combination of trimming, frog support and therapeutic shoeing.

Can laminitis be prevented?

There is no 100% guaranteed way to prevent laminitis. What you can do is try to control factors that can lead to laminitis. Keep your horse in a healthy body condition. Avoid access to large amounts of grain or lush grass at one time. Make sure grain bins are safely secured. If you suspect your horse may have Cushing's disease have him evaluated by your veterinarian and placed on medication to control the disease if indicated. Avoid excessive riding on hard ground. Remember, be sure to call your veterinarian immediately if you suspect your horse is showing signs of laminitis.