

THE LAMINITIS SEASON HAS ARRIVED!!

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Laminitis is a life-threatening disease, and sometimes even the best care doesn't change an unfortunate outcome. However, with prompt veterinary attention and proper first aid, your horse's chances at a successful recovery increase immensely. If you suspect that laminitis (or founder, as it is known in layman's terms) is to blame for your horse's sudden lameness, call your veterinarian immediately. Whilst waiting for the vet's arrival carry out the following:

1. Think back on your horse's recent health history. Has he been suffering from any illness, including fever, colic, disease or injury? These factors can predispose a horse to laminitis. If your horse has a history of laminitis, then you already know he's a high-risk candidate for the disease.
2. Has your horse had a recent diet or pasture change, or has he indulged in something that's normally off-limits or carefully rationed, such as grain or other feed? Too many carbohydrates (sugars) and proteins are a big no no. Autumn and Spring pastures contain higher levels of fructans (sugars), and are the culprits in many laminitis cases.
3. Check for heat and increased digital pulse along all four hooves. Does one hoof seem warmer to the touch than the others? To check for an increased digital pulse, feel behind each fetlock. A bounding digital pulse can indicate inflammation and pain associated with laminitis. Keep in mind that laminitis can strike one hoof, or more! Most often, laminitis affects the front feet.
4. Trotting a horse out is a way to evaluate soundness or turning the horse in a gradual corner, but if you suspect laminitis wait for your veterinarian to arrive first. Trotting a lame horse—particularly one suffering laminitis—for an extended period can cause further

damage. If your horse is suffering a bout of laminitis, he will probably be reluctant to move, but just in case, keep him in a stall or small paddock while waiting for the vet's arrival.

5. Don't medicate your horse unless your vet advises to do so. If your vet is expected to arrive soon, withhold all feed including spring or autumn grass.

HORSES AT RISK FOR LAMINITIS AND FOUNDER

The following risk factors exist for laminitis and founder:

- Cushings ponies or horses
- Horses on a high grain diet
- Heavily crested horses and ponies
- Heavy breeds, such as draft breeds (large body weight)
- Overweight horses
- Unrestricted grain intake (if the horse breaks into the feed area, for example)
- Horses on lush or high protein pasture

Three phases of laminitis in horses are identifiable: developmental, acute and chronic.

Developmental laminitis

This phase defines the period between the initiation of factors that result in delamination, and the emergence of clinical lameness. While owners are unable to identify possible laminitis at this stage, a vigilant veterinarian who knows what breeds and conditions present risk factors will initiate appropriate therapies. (See Horses at Risk for Laminitis.)

Since pre-existing illness leads to laminitis, the symptoms of early laminitis are also the symptoms of the precipitating illness. Digital pulses and distal limb temperatures may be increased or decreased but no lameness is evident.



Occasionally, no development phase can be recognized; the horse is simply found to be in the acute phase with no apparent ill health preceding or accompanying it.

Acute laminitis

This may be defined as the period between the clinical onset of lameness and the stabilization of laminar degeneration/breakdown.

Symptoms of the primary illness will be present along with lameness - usually in the front feet. On occasion, all four feet will be affected. When the forelimbs are affected, the horse will shift weight to the back legs, with the front legs extended. This is the typical "founder stance." In response to the pain associated with the condition, the horse may refuse to stand or walk. In the early stages, identifying the condition may require turning the horse in a circle, preferably on a hard surface. An affected horse's gait is typically short with rapid foot placement, hence the term "walking on eggshells."

At this stage, the digital pulse will be increased and the hoof will have an elevated temperature. There will be pain when the toe is compressed with hoof testers and there may be a depression of the skin proximal to the wall of the hoof, suggesting rotation or sinking of the distal phalanx.

At this stage, it is wise to X-ray the hoof, for baseline purposes, and to determine the position of the distal phalanx relative to the hoof capsule.

Acute laminitis occurs anywhere from 24 – 72 hours after the initial damage to the basement membrane and causes considerable pain. An affected horse may refuse to stand, and have increased breathing and pulse rates in response to pain.

Chronic laminitis

This occurs when displacement of the distal phalanx has taken place but no active laminar necrosis is present. Horses with this condition are likely to get recurrent episodes of acute laminitis.

Abnormal growth of the hoof may be present. When the dorsal laminae are affected, diverging rings may be noted around the hoof wall. These will be wider at the heel than the toe, indicating that growth at the toe is slower than the heel.

The degree of lameness present depends on the use of the horse and quality of care.

Radiological changes at this stage will include improper alignment of the distal phalanx and hoof wall combined with the remodelling and osteolysis of the distal phalanx.

Treatment for laminitis and founder

The earlier treatment for laminitis is initiated, the better. If laminitis is suspected, or the horse has been exposed to a risk factor (e.g. carbohydrate overload, shock), treatment should begin immediately.

Treatments for laminitis vary according to the severity of the condition but include:

- Imposing dietary restrictions to prevent overeating and obesity.
- Administering fluids if the horse is ill or dehydrated.
- Administering drugs and/or natural medicines, such as antibiotics to fight infection, anti-endotoxins to reduce bacterial toxicity, anticoagulants and vasodilators to improve blood flow to the feet. (Corticosteroids are contraindicated for laminitis as they can cause it to worsen.)
- Administration of painkillers. Since moderate to intense pain often accompanies laminitis and founder, the veterinarian will likely prescribe painkillers and/or anti-inflammatories for the horse.
- Use of a magnetic hoof pad. This recently introduced treatment is believed to increase local circulation and help relieve pain.
- Stabling the horse on soft ground, such as sand or shavings.
- Encouraging your horse or pony to move (at a walk), even though this can be painful and even more painful to watch, it increases blood supply to the affected areas.
- Opening and draining of any abscesses that may develop, don't attempt this yourself, get a vet or farrier to carry this task out.
- Co-operation with the horse's farrier. Toe break over is critical to alleviate pressure points.
- Early treatment of the primary problem. (A delay of even a few hours can literally be the difference between continued healthy living and euthanasia.)
- X-raying the hoof or hooves is the only way to determine if damage has occurred and what the correct treatment can be. Remember that even the best farriers cannot see through a hoof.

Preventing laminitis and founder

Laminitis is a disease that is avoidable when proper horse management is practised consistently.

Horse owners wishing to prevent the condition should observe the following:

- Avoid feeding excesses and keep the horse at a reasonable weight.
- Watch for and avoid grass surges on protein rich pastures. Autumn and Spring are the danger seasons. Yard, stable or put your horse in an area that has little or no grass and feed with soaked hay. If you must feed a hard feed, try something that has very low protein like Dunstan's Ezy Beet. Keep your horse off grass that is bathed in sun, this increases the sugar content in the grass and makes it much more dangerous. Get veterinary advice, there is a strong likelihood your vet may suggest no grass at all.
- Give the horse unlimited access to fresh, clean water.
- Make changes to routines slowly and progressively, to avoid stress.

