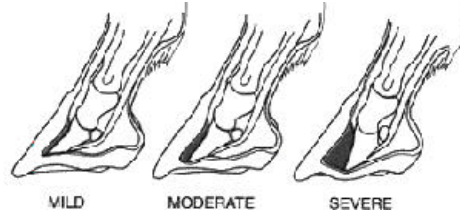


### **What is laminitis?**

Laminitis is inflammation of the lamina of the hoof. Laminitis is the medical term for the disease known as founder. "Founder" means to sink. The lamina is the soft tissue that attaches the coffin bone to the hoof capsule. As the lamina become inflamed during laminitis, the hoof cannot expand to accommodate the swelling. This results in pain for the horse, as well as a compromise in blood flow to the coffin bone. The inflammation and loss of blood flow to the lamina and coffin bone causes the bond between the coffin bone and hoof to weaken. The backward pull of the Deep Digital Flexor Tendon 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. Eventually the coffin bone can "sink" through the sole of the foot.



### **What causes laminitis?**

Laminitis has many causes that include fever, illness, metabolic abnormalities, grain/lush grass overload, excessive weight bearing due to a problem with another leg, and retained placenta. Often no cause is known. In Arizona, there seems to be some correlation with the summer months when the ground heats up. Horses that are overweight or have metabolic disease (such as Cushing's Syndrome) are predisposed to laminitis.

### **What are the signs of laminitis?**

Laminitis is most commonly seen in the front feet. Initial signs of laminitis may be shifting weight from one foot to the other, or they may appear stiff on the front legs or leg. They often rock back with the rear legs underneath the body and the front legs extended forward. The pulses to the feet will be increased and the feet feel warm to the touch. In more severe cases, the horse will lay down and be reluctant to rise.

### **What can be done about Laminitis?**

If you suspect your horse has laminitis, contact your veterinarian immediately. The sooner treatment is initiated the better the prognosis for a good outcome. The inciting cause of the laminitis should be addressed, and if found should be corrected. Radiographs are very important in evaluating the progress of the disease and directing the appropriate treatment. Acute laminitis can lead to rotation of the coffin bone as the laminar support of the bone weakens. The goal of treating acute laminitis is to minimize pain and inflammation, and hopefully prevent rotation of the coffin bone. Placing the horse on soft bedding, putting foam pads on the feet, and administering a nonsteroidal anti-inflammatory like bute are often prescribed. In the early stages, icing the feet can be effective. Following a case of acute laminitis, 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 acutely and chronically affected horses, in order to stabilize the foot and coffin bone and to promote proper weight bearing and mechanical support for the laminitic foot. Your veterinarian and farrier working together can prescribe the proper combination of trimming, frog support, and therapeutic shoes and pads.

**Can Laminitis be prevented?**

There is no sure way to prevent laminitis. You can, however try to control some of the inciting factors that lead to laminitis. Keep your horse in healthy body condition. Ponies and donkeys seem especially difficult to maintain at an acceptable weight. The body condition of your horse or pony can be evaluated by your veterinarian and feeding recommendations can be made. Avoid access to large amounts of grain or lush grass at one time. Make sure grain bins are safely secured. In the summer months, your horse should have a shaded area to stand during the day. Be sure to call your veterinarian if you suspect your horse may be showing signs of laminitis.

**Beau Whitaker, DVM**