Laminitis: Understanding Founder

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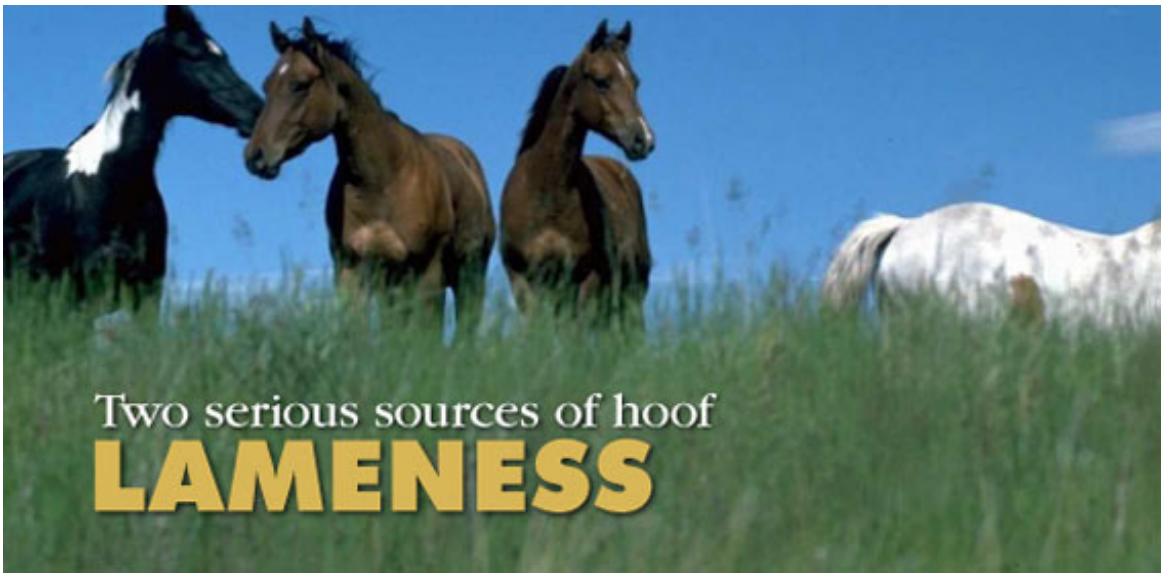

Laminitis, or "founder" as it is commonly called, is one of the most debilitating types of lameness associated with the hoof. There are two general types of laminitis - mechanical and metabolic - both result in damage to the foot's laminae (the delicate tissues suspending and attaching the coffin bone to the hoof wall). Mechanical laminitis results from overload on a horse's foot, either from the horse repeatedly pounding on hard surfaces or trying to keep his weight off of one foot.

Some ways to avoid the risk of mechanical laminitis include keeping your horse's weight in check and keeping him off of hard surfaces for prolonged periods of time. Proper hoof-trimming and shoeing are also important.

Metabolic laminitis - the more common form of laminitis - often coincides with severe toxemia. Toxemia may be caused by gorging on grain or lush grass. It can also stem from a systemic infection such as one caused by retention of the placenta after foaling. (Please note that not all horses suffering from severe toxemia develop laminitis.)

Researchers do not yet fully understand all the causes of metabolic laminitis, but evidence suggests released toxins cause a constriction of the veins in the horse's foot, retarding blood flow through the capillaries in the foot's laminae. As pressure builds up within the capillaries, fluid accumulates in the spaces between the tissues of the foot. Eventually, blood flow bypasses the capillaries altogether and moves directly from the arteries to the veins. The lack of blood to the laminar capillaries results in death of the laminae. The coffin bone, which relies on the laminae for support, then rotates downward.

Metabolic laminitis typically affects both forefeet. With this condition, the feet are often hot and extremely painful, and the horse has a pounding digital pulse. A horse with laminitis stands with his hindquarters tucked under his body in an attempt to shift the weight off his front feet.

Consistent use of supplements to help strengthen your horse's hoof may help decrease the damaging effects of laminitis.

If you suspect your horse is suffering from laminitis, immediately call your veterinarian. Rapid action is critical to give your horse a chance of returning to soundness. If your veterinarian diagnoses laminitis, she or he will probably give your horse additional medication to increase blood flow to the foot. Horses with mild laminitis stand a good chance of returning to their previous activities if they receive immediate medical attention.

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