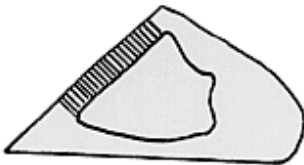




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Laminitis

Laminitis is one of the most painful and crippling diseases of the horse. It describes the breakdown of the bond between the hoof capsule and the pedal bone in the horse's hoof. The bond is formed by laminae shown as parallel lines in the diagrams below.



Normal relationship between pedal bone and hoof wall



Rotation of pedal bone relative to hoof wall due to damage to the laminae.



Sinking of pedal bone within the hoof capsule

Causes of Laminitis

There are many causes and unfortunately it is not just the fat, overweight pony fed on lush spring grass that is susceptible to the disease. Often events happen remote from the feet but the outcome is laminitis.

Overfeeding – excess grain or lush pasture
Change in work load
Illness
Retained afterbirth after foaling
Obesity
Lack of proper footcare
Trauma e.g. concussion from roadwork
Mechanical causes –e.g. when very lame on the opposite foot
Drugs – high or prolonged use of steroids
Cushing's disease – in horses and ponies over 15 years
Stress – e.g. transport

Signs

Signs of laminitis can vary from

- subtle lameness in one foot
- a stiff gait and placing the heel of the hoof on the floor before the toe
- refusing to pick up feet
- laying down a lot
- leaning back onto the hindlegs with the forelimbs stretched out in front
- difficulty turning

There may be sweating or an increase in the rate of breathing.

It is important to recognise the signs of laminitis early in the course of the disease because early treatment can make a huge difference to the final outcome.

Often there is an increase in pulse intensity over the arteries as they course over the back of the fetlock joint. This is sometimes associated with an increase in pulse rate if the horse is in a lot of pain

Normally the sole of the foot is concave or flat. If the sole in front of the frog changes in appearance or becomes convex then this is very serious.

A horse or pony that is suffering from chronic laminitis often has rings on the hoof wall that demonstrate a change in hoof growth, the heel growing faster than the toe. This growth causes dishing of the hoof wall.

Treatment

Treatment of laminitis can be both financially and emotionally draining.

- **Laminitis should be treated as an emergency.** Changes can occur in the foot within hours. The pedal bone loses its support from the hoof capsule and becomes unstable.
- It is of paramount importance that the horse is **box rested** on a deep bed. If the laminitis occurs when away from home, it would be better to travel the horse home by trailer or box. The instability within the hoof capsule will lead to rotation or sinking of the pedal bone if the horse is forced to move.
- **Early treatment** can improve the chances of the animal returning to an athletic career.
- Anti-inflammatories, vasodilators (**drugs** to improve blood supply) and **frog supports** are all treatments often instigated by the veterinary surgeon.

- The use of a **registered farrier** is of paramount importance. Corrective trimming is essential for the long-term maintenance of chronic laminitic horses and ponies.
- Laminitic horses and ponies may require foot trimming and reshoeing as often as every 4 weeks.
- Often long term therapy requires the vet and farrier working together. Remedial farriery often involves the use of specialist shoes which are applied with the help of x - rays.
- Dorsal wall resection - sometimes the front of the hoof wall requires removal.



Chronic laminitic before shoeing



Chronic laminitic after corrective trimming & shoeing

Prevention and control

Sadly treatment of laminitis does not always lead to a cure. Prevention is therefore the way forward. Some causes are often difficult to avoid such as illness, retained afterbirth or lameness in another limb.

1. **Attention to diet is important.** If your horse has a change in work routine then remember to change the diet accordingly. Make all dietary changes slowly. Ensure high fibre intake at a minimum of 2 % bodyweight. Keep bucket feeds small. Sometimes haylage can bring on an episode of laminitis.
2. **Care should be taken during the grazing season.** Spring and autumn grazing can lead to laminitis due to a flush in grass growth, an increase in fructan content and an upset in bacteria in the hindgut. There are plenty of muzzles on the market that allow the horse to drink and graze but just slow down the amount of grass ingested. Alternatively fructan levels are considered lowest at night so grazing overnight may be an alternative. Well managed fields with grazing consisting of low stems and more leaf such as those grazed by sheep will also have lower fructan content. There is a prescription medicine called *Founderguard* available that can be used to prevent intestinal upset when horses susceptible to laminitis are turned out to graze. Your horse has to be under treatment by the practice before it can be prescribed. Probiotics can help to maintain a healthy intestine.
3. **When you are seeing your horse on a daily basis it is sometimes difficult to appreciate a weight gain.** We recommend the **use of a weigh tape** to measure your horse monthly and record their weight. In addition it is useful to condition score your horse. Weigh tapes and condition score cards are available from the practice. A guide to average weights for horses and ponies are 250-275kg for a 12.2hh pony and 500-550kg for a 15hh horse but these can vary according to type.
4. **Regular attention to footcare** is of paramount importance. Use of a registered farrier at all times is essential. He or she may spot the early signs of laminitis before you may be aware of a problem.

Should you require any advice regarding laminitis please feel free to contact us on 01254 888600, or e mail info@equine-vet.co.uk.