

Laminitis

Laminitis is a condition that most horse owners will have come across but what actually causes it and what can we do to prevent our horses and ponies from getting it?



Laminitis refers to a condition caused by ischaemia of the sensitive laminae within the foot. The laminae are small attachments that keep the pedal bone attached to the hoof wall. The lack of blood supply to the laminae can cause damage to the laminae which leads to pain for the horse and can also disrupt the attachment of the pedal bone resulting in sinking or rotation of the pedal bone within the foot.

There are many different reasons why horses come down with laminitis, including pasture associated (i.e too much spring grass), weight bearing laminitis (too much weight placed on one foot because of pain in the opposite one), equine metabolic syndrome, equine Cushing's disease, and endotoxemia. The exact reason as to why horses develop laminitis is still unclear, although we now have more information about risk factors and underlying causes. More recent research has demonstrated that underlying metabolic disorders play an important role in a much higher percentage of cases than previously thought.

Some of the clinical signs of an acute case of laminitis are easily recognised. The horse/pony will stand rocking back onto the heels to take the weight off the toe, or they will weight shift from one foot to another. The hoof will feel warm to touch and bounding digital pulses can be felt over the back of the fetlock joint. However not all cases are so acute and can be more difficult to recognise. Some cases of laminitis will start with mild stiffness when the horse is walked out, particularly when turned in a circle, or when it is ridden on hard ground. It is important to pick up on these early signs as the earlier a horse is diagnosed the more effectively it can be treated.

Treatment

First aid treatment on the first day that signs of laminitis are noted is vital in improving the overall outcome of laminitis. The vet should be contacted straight away if signs of laminitis are noticed. Whilst waiting for the vet to arrive the horse should be moved into a stable with a deep bed of shavings. It is best not to walk the horse far, if they are out in the middle of the field the use of the trailer to bring them back into the stable is advised if possible.

Treatment consists of anti-inflammatory medication to reduce the inflammation within the feet and to provide much needed pain relief for the horse. This is also sometimes combined with a sedative called acepromazine which keeps the horse quiet and also causes dilation of the peripheral blood vessels, which may help to improve the blood supply to the foot. In cases where there is concern there has already been, or is risk of, movement of the pedal bone sole supports can be used to help prevent rotation or founder (sinking) of the pedal bone.

Appropriate medication needs to be continued and the horse's progress monitored closely. Part of this, once the horse is stabilised, includes radiographs of all affected feet. These need to be obtained to analyse the degree of movement of the pedal bone. These radiographs can also then be used to allow the farrier to trim the foot appropriately and for specialist shoes to be fitted if required.



Treatment for laminitis can take a long time, and means weeks of box rest and a slow rehabilitation process. However treatment for severe cases is not always possible if the degree of movement of the pedal bone is too severe. It is for this reason that with laminitis prevention really is better than cure and as vets we are always striving to help clients in preventing their horses from getting laminitis.

Metabolic disorders are one of the biggest underlying factors that lead to laminitis and something that we can control in order to prevent future cases. The two metabolic disorders that we can monitor are Equine Metabolic Syndrome and Equine Cushing's Disease.

Equine metabolic syndrome (EMS) is a syndrome in which horses have excess fat stores and become insulin resistant. Normally EMS occurs following too much food over a period of time but some horses are naturally predisposed to the condition and not all horses will be overweight. Clinical signs of metabolic syndrome include excess weight, particularly in the neck area, they are usually middle aged horses (normally 5 to 15), very good do-ers, repeated bouts of laminitis. These horses are predisposed to laminitis due to their high insulin levels, and a simple blood test can tell us if a horse or pony is at risk of laminitis. Treatment involves reducing insulin resistance. One way is by using a drug called Metformin but exercise and diet are the most important methods in reducing resistance. The more a horse is exercised the more their insulin sensitivities are increased. This is not always possible once they have laminitis so keeping weight down and doing regular exercise is an important way to prevent horses getting laminitis in the first place.

Equine Cushing's disease is also an important disease to monitor in laminitic horses. Cushing's is caused by a dysfunction of the pituitary gland within a horse's brain. It creates an imbalance of hormones, of which the important ones for laminitis are insulin and cortisol. Clinical signs of Cushing's include a long curly coat, normally seen in horses 15 years or older, excessive drinking and urination, abnormal fat stores, weight and muscle loss, and increased predisposition to infections. Cushing's can be diagnosed with a single blood sample for ACTH and treated with pergolide, a dopamine receptor agonist. Horses that have either single or repeated bouts of laminitis, particularly in the winter, are caused by Cushing's. Often horses that have Cushing's underlying and have laminitis can be difficult to get under control until the Cushing's is controlled. Often owners struggle to manage these horses on a day to day basis due to the repeated bouts of laminitis. So it is important that we test and identify these horses.

New information is becoming available about laminitis all the time. Remember than prevention is better than cure. For the latest information please visit our website scarsdalevets.com/equine

MKTG/Equine/Collateral/EquineInformation/Laminitis



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