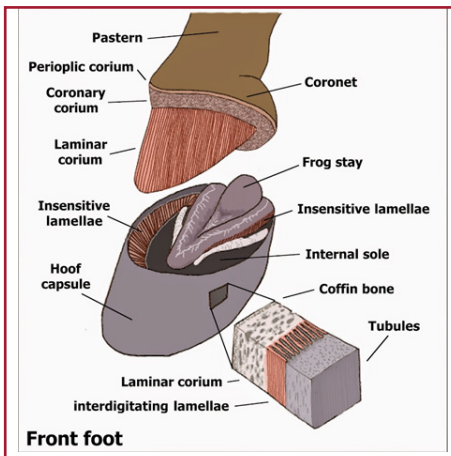


EQUINE NEWSLETTER

Chronic laminitis management



Among the many challenges that might face any horse owner, having your horse suddenly becoming laminitic is probably one of the hardest.

But what does "Laminitis" even mean? It literally stands for an inflammation of the lamellar corium

which is a sensitive layer bonding the hoof wall to the pedal bone inside the foot. It is unfortunately a common and frequently recurrent condition in horses, ponies, and donkeys.

It can affect one or all feet, but it is most often seen in both front feet concurrently. When lamellae layer becomes inflamed, the horse can show signs of pain, lameness and reluctance to move.

The onset of inflammation weakens the bond between the hoof wall and the bone. After multiple episodes of laminitis, or in severe cases, the pedal bone and the hoof wall can separate. Laminitis then becomes chronic, as definitive and irreversible changes such as pedal bone sinking, or rotation occur inside the foot.

As the disease becomes chronic, the clinical signs can sometimes appear less evident, the horse only appears occasionally to have sore feet. Laminitic pain is often compared to having a nail removed with pliers. Even years after the diagnosis, the condition remains painful especially when the lamellae suddenly becomes inflamed again.

But how and why would my horse suddenly become laminitic?

Over the years, a lot of research effort has been made to better understand what triggers laminitis. Among the multiples causes of laminitis, three main reasons have been identified:

- **Hormone related laminitis (Endocrinopathic Laminitis)** which is thought to be by far the majority (~90%) of laminitis cases. Equine Metabolic Syndrome (EMS), Cushing disease (PPID) or corticosteroid induced laminitis are part of this category.



- **Sepsis associated laminitis** which occurs secondary to a primary illness such as colic, diarrhoea, retained placenta post foaling and many more.
- **Lameness related laminitis:** supporting limb laminitis is usually seen in horses with a severe lameness such as a fracture, a septic joint, a big sole bruise or abscess.

After at least a few days of non-weightbearing on the injured leg-laminitis develops in the supporting leg.

How can your vet and farrier help your horse through chronic laminitis?

When your vet or farrier suspect that your horse may be laminitic, they may then recommend X-rays of your horse's feet. This is a non-invasive, fast, and efficient way of imaging the inside of the hoof. It is essential for assessing what is truly happening within the foot and identifying the origin of the pain.

It will help your vet understand the severity of the laminitis and reach a prognosis. Regarding the treatment, it will enable your farrier and your vet to guide the trimming and possibly corrective shoeing necessary to restore your horse's comfort. Laminitis is one of the many examples where vets and farriers work as a team, aiming to provide the best of care to your horse through those difficult times.

What does it look like on the screen?

To help you better understand what we are looking at when doing foot X-rays, you will find below an example of a chronic laminitic horse X-ray. The image is taken from the side as we aim to evaluate the profile of the foot. The yellow stars on the image represent the events causing pain to your horse.

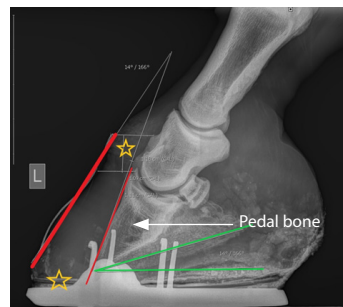


Figure 2: Profile view of a chronic laminitic foot.

We can see that:

- the edge of the pedal bone is sinking from the top coronary band (yellow star).

- the hoof wall and the pedal bone surface (red lines) are drifting apart. The pedal bone isn't parallel to the ground anymore (green lines).

The horse is walking on the edge of his pedal bone which is extremely painful. A quick visit from the farrier and anti-inflammatories will restore his comfort.

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Continued from overleaf...

If you have a chronic laminitic horse it is also very important that you do not miss your appointment with the farrier! Ideally every four to six weeks. Letting the foot grow too much will then make your horse uncomfortable again and would increase the risk of worsening his condition.

Daily management of the laminitic horse/pony

There are several points to be taken into consideration regarding the management of the daily routine.

- First feed your horse with previously soaked hay. This will lower the amount of sugar present and help prevent your horse from ingesting too much sugar and starch. If you wish to give a balancer to your horse, you might want to check the package and make sure it is a low starch/low sugar feed.
- Also to reduce to pain produced by the laminitis, anti inflammatories like Phenylbutazone ("Bute"), or Meloxicam can also be given according to vet's advice.
- Finally to prevent further laminitic episodes, your vet might also advised you to test your horse for Cushing or EMS.



Picture of Molly, one of our chronic laminitic patient enjoying a peaceful life outside. Her owner designed a small paddock to control the amount of grass she eats daily.

Needle shy horses

Do you dread your horse's annual vaccination or worry what will happen in the event of him needing urgent medical treatment but the Vet can't get anywhere near him?

Unfortunately this is a fairly common issue we encounter in the practice. Needle/ Vet shy horses can exhibit dangerous behaviour not only to themselves but also to those around them, ranging from mild agitation to rearing, bucking, kicking or biting. These behaviours mean that Equine vets have the highest injury risks of all civilian professions!

These horses aren't being naughty - they are responding to an unwanted stimulus (the vet or the needle) in the way they have learned in order to avoid it.

We do have tricks up our sleeves so that we can 'get the job done' such as the use of increased restraint i.e. twitching, confinement or even oral chemical restraint. However, these methods only serve to reinforce the negative learned behaviour and amplify the issue for next time.

There is a safer way forward! The use of positive reinforcement is a well-recognised technique to help break this cycle and teach a new behaviour associated with the unwanted stimulus. This takes time, patience and repetition but is rewarding when successful.

Clicker training is a useful way to desensitise horses and has taken some of our client's horses from rearing and striking to standing quietly still and not noticing the injection! The horse learns to associate a click with a treat.

This is a simple process of advance, wait for horse to relax, click and reward, then retreat. Repeat! Once the horse is remaining relaxed at each level step it up to the next level!

For example, with a needle shy horse the levels could be:

- 1. Take a step towards the horse's neck**
- 2. Touch the horse's neck**
- 3. Pinch the horse's neck where the vaccine would be administered (base of neck in front of shoulder blade)**
- 4. Pinch the neck and introduce a syringe (a ballpoint pen will work)**
- 5. Pinch the neck, introduce the pen and apply pressure with the pen tip against the neck (to replicate the needle)**
- 6. Ask a friend/ neighbour/ stranger or any willing volunteer to do this to get the horse used to other people using the technique!**

By using this technique horses will start to associate acceptance of the procedure with receiving a click and a treat. For a video on how to use clicker training search 'Don't Break Your Vet' on YouTube. There are also some great videos on calm clipping, worry-free worming and learning to stand, amongst others.

Our Vet's will be happy to teach and use this technique but prepare ahead! We will be much more successful with stress free vaccinations if the groundwork is already in place!

Emergencies / Out of hours

In the unfortunate event that your animal requires veterinary attention out-of-hours, please dial the usual office number, where you will be given the telephone number of the on-duty vet.

It may be useful to keep a pen and paper handy to take this number down. On the rare occasion that the duty vet is out of telephone reception, your call will be received by a helpful member of our answering team, who will ensure someone attends the emergency as soon as possible. **The answering team at Kernow can be contacted directly on 01432 381440, if for any reason you cannot get hold of the duty vet.**

HEREFORD: **01432 351471** • BROMYARD: **01885 488440** • LEDBURY: **01531 806129** •  **@belmontfarmvets**

Clinical Vets: Dominic Alexander • Will Allman • Mike Bellamy • Andrew Cooke • Joel Galloway • Nick Gibbon • James Hipperson • Louise Lafin
William Main • Hannah Mitchell • Antoine Premont • Matthew Pugh • Caroline Rank • Harry Walby • Charlotte Watkins • Sarah Watson
Support staff: Sadie Davies • Michelle Harris • Lucy Hughes • Sybil Legge • Laura Langford • Alice Mainwaring • Ros O'Sullivan • Sophie Powell
Andrea Smith • Pam Strange • Millie Whitlock