

LAMINITIS

WITH THE SPRING GRASS JUST AROUND THE CORNER
LAMINITIS IS ON EVERY OWNERS' MIND

With the Spring grass just around the corner Laminitis is on every owners' mind. A very common but still incompletely understood condition which causes varying degrees of foot pain, we sadly lose a number of horses to Laminitis every year.

Signs vary from marginal discomfort of the slightly 'pottery' pony to severe lameness where the horse or pony spends prolonged periods lying down. Owners often underestimate its potential to cause long term unsoundness or extreme distress. It is not uncommon for severe and uncontrolled cases to require euthanasia on the humane grounds of incurable suffering. In general the faster and the more aggressive the treatment the better the response and the better the prognosis. The pain that is experienced during a laminitic episode is due to inflammation of the soft tissue 'leaves' that suspend and support the pedal bone within the hoof capsule. If the inflammation is not controlled this rapidly leads to irreversible damage to the laminae preventing them from doing their job. This allows the pedal



bone to start pulling away from the normally strong and elastic laminae as the tip of it starts to head towards the sole of the foot. This rotation is caused by the pull of the strong flexor tendon which runs down the back of the leg and inserts onto the back of the pedal bone. As the tip of the pedal bone starts to rotate down towards the sole the pull on the laminae increases and the pain the horse experiences continues. At this stage, anti-inflammatories and pain relief such as Equivalazone or Danilon become less effective as the pain is not just being caused by inflammation – it is being caused by the damage being done to the laminae and the constant pull on those laminae from the rotated bone. Radiographs are vital in determining whether there has been any abnormal movement of the pedal bone and enable the vet to prescribe the most appropriate treatment. Horses with rotation of the pedal bone require intensive nursing and remedial farriery to have any chance of becoming sound again in the future. Sadly this often requires significant financial input and long periods of time confined to a stable which

(understandably) may not be tolerated well by the horse. We aim to treat laminitic cases before the pedal bone starts moving and this requires the owner noticing and reporting the early signs of the disease.



Why Would my Horse or Pony Get Laminitis?

Any horse can develop laminitis. They can be any age and any breed. Many owners feel that lush pasture is responsible for causing laminitis, especially in overweight horses, but the situation is not that clear. **The problem is almost always due to the horse rather than what the horse is eating. The vast majority of horses develop laminitis as a result of being unable to tolerate sugars in the diet. The two main reasons why they wouldn't be able to tolerate sugars are:**

- Metabolic Disease – Horses can become intolerant to sugars due to becoming 'diabetic'. Sometimes affected horses or ponies have abnormal fat distribution but they can also look totally 'normal'.
- PPID (Cushings Disease) – Horses suffering with Cushings Disease are much more prone to laminitis due to high levels of circulating insulin. Whilst recognised as a condition of older horses Cushings is commonly overlooked in horses under the age of 20. We regularly diagnose Cushings Disease in horses in their teens and it has been picked up in horses as young as 6 years old. The longer the horse remains undiagnosed the longer it is a 'laminitic time bomb' waiting to go off.

What Can we Do To Prevent Laminitis?

- Test for Cushings Disease
- Test for Metabolic Syndrome
- Regular Foot Trimming by a registered Farrier to ensure Feet are kept in the correct shape. Longer toes predispose a horse to laminitis due to the mechanical forces being applied to the structures within the foot.
- Do not allow your horse to become overweight. An overweight horse is at much greater risk of developing Metabolic Syndrome (and therefore laminitis). Your horse or pony should be at its lowest body weight at this time of year – do not allow too many extra

pounds to creep on over the Spring and Summer. Ideally keep your horse or pony slim with extra exercise but you may need to impose dietary restriction if you are unable to ride or exercise your horse.

How can I recognise the early signs?

In mild cases of laminitis, the horse or pony may appear slightly 'pottery'. They are commonly more uncomfortable walking down sloping ground, stony ground and when asked to turn tightly in one or both directions.

The forelimbs are most commonly affected although it is possible for the hind limbs only or all four feet to be affected. Often one foot is worse than the others.

The affected foot or feet may appear abnormally warm to the touch and the pulse taken at the heel's arteries may appear particularly strong.

Severely laminitic horses will often stand with hind limbs well under the body and forelimbs stretched out in front, in an effort to keep weight off the painful front feet. Affected horses may also move with their heels landing first to try to avoid concussion to the painful toe region. If all four feet are affected, they may lie down for long periods or may constantly lift their feet alternately from the ground.

Horses which have suffered chronic or 'subclinical' (undetected laminitis) will have evidence of abnormal hoof growth with heel growth being faster than toe growth due to deformity of the structures within the hoof capsule. This is most easily spotted with 'rings' of growth being wider apart at the heel of the foot compared to the front of the foot.



When to Call the Vet

Acute laminitic inflammation can progress to severe laminitis with pedal bone rotation within a matter of hours of the start of the condition being noticed. For this reason we always treat laminitis as an absolute emergency.

What Can I do to Help Whilst I Await the Vet?

Your horse should be stabled as soon as laminitis is suspected.

Ensure your horse has a deep shavings bed up to the front of the door. Ensure your horse is offered water if it is finding moving around the stable difficult.

NEW STAFF SARAH WOODHEAD

You may already know Sarah Woodhead who has worked during the weekends for the practice helping to provide our in-patients with the very best of care. Sarah has now joined us in the office to assist with answering the telephone, lab work and all other office duties. Sarah lives locally in Woodbury and spends her time out of work looking after her children, Clara and Tom as well as riding and supporting Exeter Chiefs!



ORDERING PRESCRIPTION MEDICATION

When ordering routine prescription medication please call us at least 1 full working day in advance of needing to collect the medication. Many medications have to be ordered in and may require even longer so please call beforehand to save a wasted trip.

We are getting many clients turning up for medication that has not been pre-ordered which means the nurses leaving the in-patients or the office staff leaving the telephones, often at busy times, to try to accommodate these clients (which we would prefer not to have to do if possible!). **Please help us to provide a better service by giving us the time to prepare your medication.**

ST DAVID'S EQUINE PURCHASES NEW KIT (AGAIN!)

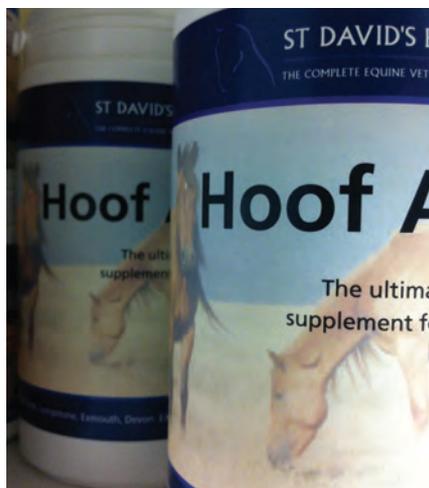
Everyone knows how much Tony Kaye likes to make sure the vets have the best (and shiniest!) kit available to them. In recent years DR (Digital Radiography) technology has dramatically improved. We have recently purchased a fantastic new wireless DR system to replace our existing DR machine. This machine uses wireless technology, is super fast and produces images of the highest resolution to make diagnosis on the yard even easier. Whilst backs and stifles are still best imaged at the clinic where very high power is required for the best diagnostic images we are now able to produce excellent images with unbeatable quality of feet, fetlocks, heads and hocks etc out on yards. **The kit is also lighter and more compact making it a lot easier for our vets to transport so everyone is extremely happy with this new addition to the practice kit!**

ST DAVIDS SUPPLEMENTS HOOF AID SUPPLEMENT

Our Vets are seeing great results with The Hoof Aid Supplement supplied by 'Hestevard' for our practice. Specifically formulated to provide the best scientifically based products at the best possible price this product is backed up by its manufacturers who offer a full refund to anyone who uses 3 pots of Hoof Aid and does not see a difference in horn quality or growth. To monitor progress it is advised that photos are taken of the horse's feet before, during and after treatment. These will be needed to prove that there has been no improvement if you feel your horse has not benefitted. We have been supplying Hoof Aid for over 12 months and have not had any dissatisfied clients reporting that the product has not significantly improved the hoof horn quality or growth.

This product is designed specifically to benefit:

- Horses with weak cracked feet
- Horses which fail to grow much horn
- Horses being treated by remedial farriery (where promotion of horn growth is desirable to allow the farrier to produce quicker changes in foot conformation).
- Horses with collapsing heel horn
- Horses with impaired microbial gut activity that may, as a result, be deficient in Biotin (for example horse on antibiotics or a high starch diet)



What Active Ingredients are Present in the Supplement?

- **BIOTIN:** This product contains HIGH levels of Biotin which is vital for the synthesis of keratin in the hoof horn. Biotin alone will improve the structure of the outer layer of horn, the Stratum Corneum, but cracks and defective horn which originate in deeper structured of the hoof wall require additional nutrients such as:
- **CALCIUM:** Responsible for structural cohesion within horn.
- **Bioavailable SULPHUR, METHIONINE and MSN:** Essential for production of strong hair and horn as it allows the formation of bonds within the keratin structure which gives it its durability.

- **ZINC:** To enhance healing of damaged horn and connective tissue.
- **AMINO ACIDS:** Vital building blocks of proteins including keratin.

We would recommend that if your horse is already on a Biotin supplement that you compare the levels of Biotin in the product that you are using with the Biotin content in this product. In all cases that we have come across this product is cheaper per day than comparable products as well as providing higher levels of Biotin.

Remember – if there is no significant improvement in growth or quality of hoof horn the full purchase cost will be refunded (please ensure you submit good quality photos for proof).

LONG TERM OFFERS

Our standard visit fees are all now only £25 regardless of the location of the horse as long as you are in our catchment area and registered with the practice.

Receive £10 off if your Routine Dental and Annual Vaccination are performed at the same time.

If 3 horses are each having a routine dental on the same yard at the same time a £10 discount will be applied to each horse. Please note this offer applies to routine dental work only – not dental checks or remedial dentistry.

WHAT IS A BONE SCAN?

Bone Scan is also known as 'Nuclear' or 'Gamma Scintigraphy' and is an advanced diagnostic imaging modality which involves using radioactive markers to highlight 'hot spots' which indicate increased blood flow and metabolic activity. It is particularly useful for imaging difficult areas in horses such as the back and pelvis as well as identifying the origin of sinusitis and tooth root abscesses within the head.

How Does it Work?

The horse is injected with a radioactive isotope (usually Technetium-phosphonates) which distributes itself around the body and is taken up in the areas of increased bone turnover. These areas then emit radiation which is picked up by a huge Gamma camera allowing data to be collected and stored on the computer. The vets then use the data to identify areas showing increased and abnormal levels of bone activity.

How is my Horse Affected?

Your horse will not suffer any ill effects from the radioactivity however will need to remain in the practice for 48 hours after



the bonescan to ensure that all traces of radioactivity are gone from the horse. The horse is required to be sedated whilst the images are taken with the gamma camera as each image is taken over the course of around 15 seconds and any movement will result in blurring.

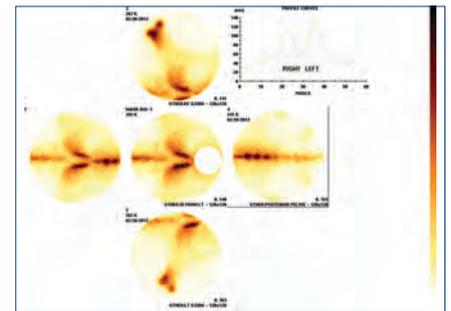
What Problems can be Investigated with Scintigraphy?

- Kissing Spines
- Fractures which do not show up on X-Rays
- Poor performance
- Multi limb lameness

- Simple lameness causes in horses which cannot tolerate nerve blocking
- Sacro-iliac pain

How Do I Arrange for My Horse to Have a Bonescan?

Bonescans are most commonly performed on insured horses due to the expense of the procedure. Our vets recommend this modality as part of their lameness investigations if they feel it may be beneficial and we also receive referrals from other practices. **If you feel your horse would benefit from a bonescan please feel free to call the practice to have a chat with one of our vets.**



TO VACCINATE AGAINST TETANUS...OR NOT?

People often underestimate the importance of vaccinating against tetanus. This is understandable when we hear so little about horses suffering from tetanus these days. However, this is not the case in developing countries where vaccination is not commonplace – hundreds of working horses and donkeys in Egypt and Morocco suffer on a daily basis from this distressing and usually fatal disease. Vaccination is an extremely effective measure against tetanus and is the reason why we are lucky enough to not be dealing with it on a regular basis.

The signs of tetanus; muscular stiffness and spasm, reluctance to move around, an anxious expression with flared nostrils, pricked ears, the tail being held rigidly and extreme reactions to external stimuli are caused by toxins being released by *Clostridium tetani*, an organism which is present in huge numbers in the gastrointestinal tract of humans and many domestic animals. The spores they produce are extremely resistant and will remain in the environment for years. There is no way of eradicating tetanus spores from soil and unfortunately there is no effective treatment for tetanus. The spores can gain entry via the smallest of wounds – in fact the last case that we treated had no obvious wounds at all. Tetanus prefers to grow in deep wounds therefore a horse

with a tiny puncture can be at very high risk. Older horses which are more prone to suffer with dental infections and foot abscesses are also at great risk – coupled with a potentially compromised immune system it is vitally important that you protect them too.

Treatment of tetanus, if attempted, consists of injecting huge quantities of tetanus antitoxin (a very expensive medication), in combination with intravenous antibiotics and intensive care nursing. Unfortunately in most cases the horse will progress to die a rapid agonising death as its cardiac and respiratory muscles fail and therefore it is kinder to put them to sleep once a diagnosis has been made.

Vaccination is effective from the age of approximately 4 months old (prior cover can be provided immediately after birth with Tetanus Antitoxin if the mare is not adequately protected). Vaccination consists of 2 injections, 4-6 weeks apart, sometimes followed by a booster after a year (depending on the brand of vaccine) and then regular boosting every 2-3 years (also depending on the brand).

Wound management also goes a long way to preventing tetanus. Any contaminated wounds should be cleaned thoroughly with dilute antiseptic (such as Hibiscrub™) as soon as noticed. Any suspect puncture

wounds, complicated wounds or wounds of any depth should always be seen by a vet to ensure that they are dealt with correctly. It is a legal requirement to ensure that the horse's passport is present at the time it is examined – this will also help the vet determine whether any additional tetanus prophylaxis is required as the history of tetanus vaccines should be recorded in the passport. If your horse has to be seen out of normal office hours and either the passport is not present or the passport has not been updated the vet will have to assume that your horse does not have adequate cover and provide costly emergency prophylaxis at the time of the visit.

The small cost of prevention far outweighs the cost of attempting treatment and the potentially devastating consequences. The cost of vaccinating a horse against tetanus should always be included when budgeting for the cost of keeping a horse. Each vaccine costs £26.37. Please contact the office if you are unsure whether your horse, pony or donkey is adequately covered and we will be able to advise you over the phone.

References: Kay (G) and Knottenbelt (D.C.) 2007; *Tetanus in Equids: A report of 56 cases.* *Equine Veterinary Education* 19(2) 107-112

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