

**OUR EXPERT**

Dr Janina Kutscha,  
Dr.med.vet  
BVSc(Hons), MRCVS



Janina qualified at the University of Munich in 2003. An RCVS advanced practitioner in equine medicine, she works at Arden House Vet Practice, Aberdeen, a member practice of XLEquine.

# Sound advice

Equine vet **Dr Janina Kutscha** offers tips and advice to help you reduce the risk of lameness this summer

Lameness is one of a horse owner's biggest concerns and can be caused by many things, from apparently minor injuries – such as small wounds or bruising of the sole – to significantly more serious issues involving bone, tendons or ligaments.

Metabolic diseases, such as tying-up and laminitis, can cause a horse to be unsound, as can infections, degenerative changes to joints or the suspensory ligament and more significant wounds.

Lameness can be characterised as mild, moderate or severe and will clinically be graded from zero to five or one–10, depending on whether a vet uses the American or British grading system.

Onset of lameness may vary, with your horse appearing suddenly lame or he may have had a niggling issue for a long time. It can also be intermittent, progressively getting worse or better over time.

If you have called out your vet, it is important to give them a full history of the onset of the problem, and how the lameness presents. They will tailor their examination depending on the information you provide.

Tell the vet when the lameness was first noted and whether the problem was acute, chronic or intermittent.

When is the lameness evident – is it obvious at all times, or only noticeable during certain ridden movements?

In addition, it is useful for your vet to know whether any treatment, such as rest, cold therapy, poulticing, massage or physiotherapy has been attempted, and whether any improvement was seen.

## Veterinary examination

Usually, your horse will be examined standing, walked and trotted up in-hand, and sometimes ridden or lunged.



Calling in a vet early can help ensure a positive outcome

Flexion tests, the application of hoof testers, blood evaluation and checking the fit of the saddle may also form part of the examination.

In some instances, this can lead to a diagnosis – for instance, where a skin wound, a hoof abscess, laminitis or tying-up has caused your horse to be lame.

In other cases, a commonly used technique called diagnostic anaesthesia or 'nerve blocking' may be used. A local anaesthetic is administered to an area that is suspected to be the cause of pain. The horse is then re-examined a short time later.

Local anaesthesia can be applied near a nerve, which subsequently desensitises the area below the injection site, or directly into a joint or tendon sheath, which reduces pain in that specific area.

In an ideal world, the horse will be sound following anaesthesia of the affected area. ▶



Lameness can be caused by many different factors





Flexion tests may feature in a lameness work up

identify the exact cause of the pain causing the lameness.

Radiography (or X-ray) is one of the most frequently used. This is mainly utilised for the imaging of bones.

You may have wondered why so many radiographs are taken of the same area. This is because each radiograph gives a one dimensional view of an area of interest.

There are standard views for each anatomical area of the horse, taken from different angles. The resulting 'set' of radiographs allows the vet to see a more detailed, three dimensional image of the area in question.

Ultrasonography is another tool used by vets as it allows you to visualise internal body structures.

It enables us to assess causes of lameness that may be related to soft tissue, such as tendon or ligament injuries, and also problems arising from the cartilage, the joint capsule or tendon sheath.

A good contact between the ultrasound probe and the scanned area are essential for a good quality picture.

It's also important that the horse stands as still as possible – sometimes sedation is required to achieve this.

Ideally, the area to be scanned is clipped and soaked with warm soapy water and a gel or spirit is applied to the skin.

Sometimes, it is necessary to scan areas within the hoof capsule. In this case the foot is soaked overnight, to moisten and soften the hoof. This allows the ultrasound waves to reach through the frog to the anatomical structures of interest.

In some instances, advanced diagnostic imaging techniques such as bone scintigraphy, magnetic resonance imaging

However, things are not always black and white and the lameness might only 'improve'. Your vet may then decide whether the observed improvement is significant enough to be the cause of the lameness.

Sometimes, the cause of the lameness is not limited to one problem and a horse may have pain in various parts of his body or various structures within the same body parts.

### Diagnosing the problem

Once the area of pain is localised, diagnostic imaging techniques are commonly used to



Ultrasound may be used to identify tendon injuries...

## How to avoid

While you cannot pack your horse in bubble wrap to avoid an injury occurring, good management can go a long way to help reduce the risk of lameness:-

● Ask your vet to perform a pre-purchase examination when you are buying a new horse. This may help you identify existing lameness or potential risk areas.



Protect legs with correctly fitted exercise bandages or boots

(MRI) or computer tomography (CT) may be necessary to ascertain the exact cause of lameness.

Thermography – which identifies 'hot spots' in the body has also been used to help identify an affected area.

## lameness

● When grooming, check for any injuries, swellings, heat and/or pain and seek veterinary advice if you are worried. Spotting an issue early on can increase the chance of a positive outcome.

● Keep your horse's feet well maintained with daily grooming and care and regular farrier visits. Pay attention to good foot balance and address any injuries, cracks and conditions such as thrush.

● Regularly check correct fitting of tack to prevent any soreness or discomfort.

● Always include a warm up and cool down phase in your horse's exercise regime.

● Adjust your training to your horse's fitness level and abilities and only gradually increase the workload.

● Avoid working on surfaces that are too deep, too thin, slippery or uneven.

● Give your horse sufficient breaks within training sessions

and also between training sessions and competitions. Often, less is more and a horse that is exhausted from intensive training the day before a competition is at a risk of injury.

● Limit work on small circles as it can put excessive stress on joints, muscles and tendons.

● Bandaging horses during exercise may reduce direct trauma to that area. However it is unlikely to prevent overload injuries and can cause pressure sores if applied incorrectly.

● Cold therapy after exercise may reduce inflammation.

● Listen to your horse and consider that any disobedience or change in behaviour could be due to pain or discomfort.

● Prevent your horse getting overweight to reduce the risk of equine metabolic syndrome and laminitis as well as reducing excessive strain on joints, muscles and tendons.



Cold hosing can help reduce inflammation

Some structures causing pain – such as within the stifle – might only be identified by a surgical technique called arthroscopy, where the structures can be visualised via keyhole surgery.

### Treatment options

The treatment of lameness depends on the underlying condition. A simple skin wound may be sutured and/or bandaged, whereas a complicated wound involving infection of a nearby joint or tendon sheath may require surgery and antimicrobial medication.

A hoof abscess needs to be drained and, most likely, a poultice to be applied for a few days, whereas laminitis can involve various treatment options for up to several months.

Commonly, your horse might receive painkillers and anti-inflammatories for a while and be put on box rest for a certain amount of time.

Injuries of tendons or ligaments usually require an initial treatment of rest, cooling, painkillers and sometimes bandaging, followed by a controlled exercise programme, which is ideally monitored with several follow-up ultrasonographic examinations.

Degenerative changes of the joint, like bone spavin of the hock or ringbone of the pastern, are commonly injected with

corticosteroids (anti-inflammatories) in order to improve the lameness problem.

At other times, surgical intervention is necessary – if a fracture needs to be repaired, for example, or a piece of bone removed, as can be required in cases of developmental diseases such as osteochondrosis dissecans (OCD).

For certain tendon and joint conditions there are regenerative treatment options such as Platelet Rich Plasma (PRP), stem cell therapy or interleukin 1 Receptor Antagonist Protein (IRAP), which may be used in combination with other treatment options to promote healing.

Vets often work closely with farriers and corrective shoeing may be part of the treatment tool box and will vary with the underlying condition that is treated.

### Foot problems causing lameness

Problems within the foot can in many instances cause lameness, particularly in the forelimb. These can vary from a simple hoof abscess or laminitis to conditions affecting the bones (coffin and navicular), deep digital flexor tendon, small ligaments or synovial structures within the foot.

It is important to remember that horses and ponies often have unbalanced feet.

This may be due to not having an ideal conformation or due to uneven use, which is sometimes caused by pain leading to uneven weight bearing.

Also, many horses that have a low heel conformation, often combined with a long toe, can subsequently get a broken back hoof pastern axis and a negative (also called retroverted) angulation of the coffin bone.

This can lead to excessive strain on structures within the hoof capsule and result in injury of the tendon and ligaments or progress to chronic damage of the joints in the lower limb, navicular bone and bursa.

Extreme heel stress can also have an effect on the digital cushion and lateral cartilage structures, impairing their function as shock absorbers and leading to generalised foot soreness.

Any unbalance stemming from the foot may also transmit towards the upper limb and could consequently lead to other lameness, causing problems within the upper limb or other parts of the body.

It is therefore very important that your farrier balances the feet well during shoeing or trimming aiming to correct any imbalance as the common phrase "no foot no horse" is very true. ■