

XLVETS EQUINE - BETTER TOGETHER

# Equine

## MATTERS

[www.xlvets.co.uk](http://www.xlvets.co.uk)

Inside this issue:

### LONDON 2012

We find out from XLVets Equine members about the veterinary provisions at London 2012 and about their experiences at this historic occasion.

### NASAL DISCHARGE

We provide advice and guidance on the common causes of nasal discharge.



# Practice Focus

In each issue of **Equine Matters** we feature a brief insight into a selection of the XLVets Equine Practices. Featured in this issue are Wensum Valley, Larkmead and Scarsdale...



## Fakenham, Norfolk

Wensum Valley Veterinary Surgeons is a four vet equine and farm practice based at Fakenham Racecourse. Our modern premises were purpose built eight years ago. The practice has medical and surgical facilities on site with digital x-ray, ultrasound units for soft tissue imaging and fertility work, video-endoscope, shockwave as well as paddocks and stabling. The practice has a great interest in equine dentistry and all the vets carry out routine dentistry as well as corrective dentistry using power tools.

We are a first opinion practice and are equally happy seeing donkeys, ponies and competition horses. We will work from the cars as well as seeing cases at our clinic.

Summerhill Veterinary Centre is our sister practice with five dedicated small animal vets based in the town centre.

Partners David Feneley and Toby Kemble also provide veterinary cover at Fakenham Racecourse.

Find us on Facebook or visit our website at [www.wensumvalleyvets.co.uk](http://www.wensumvalleyvets.co.uk)



## Larkmead Veterinary Group

Cholsey, Oxfordshire



Larkmead Veterinary Group is based in the South Oxfordshire area with 25 vets looking after equine, farm and companion animals.

Through our professional and friendly service we care for all types of horses from competition animals to much loved ponies. We offer a 24-hour emergency service, 365 days a year. Our veterinary services are offered both at your stables and at our surgery in Cholsey. Our equine team offers a number of services from routine vaccinations and dentistry, to pre-purchase examinations and lameness work ups. We pride ourselves on building strong customer relations with our clients and being the first point of call for all equine matters.



### What our clients say about us....

'For the past 14 years the Larkmead vets have cared for all my horses in the most professional and caring manner. From routine vaccinations to major emergencies their support and knowledge are second to none! We really look forward to them arriving as many of them have now become friends. I can recommend Larkmead highly...'

[www.larkmead.co.uk](http://www.larkmead.co.uk) and Find us on Facebook!

## ScarsdaleVets

Equine

### Markeaton, Derbyshire

The Scarsdale Veterinary Group Equine division consists of dedicated equine vets and nurses, providing the highest standard of care for horses, ponies and donkeys.

We have excellent inpatient facilities and hold tier 2 RCVS accreditation. We have operating facilities and surgeries are carried out by our own vets and visiting specialist surgeons. Lameness investigation and treatment is a core part of our service. We offer stem cell therapy and irap®. Medical investigation services include video endoscopy and gastroscopy, digital radiography and ultrasonography, echocardiology, and ECG. We have our own laboratory and horse healthcare shop.

We provide a full ambulatory service and see a full range of horses. We have three certificate holders and are committed to the further education of our whole team as well as clients.

We are a clinical associate practice of the University of Nottingham Veterinary School. This allows final year students to gain valuable experience with us and gives in-house access to veterinary specialists.

Find us at [www.scarsdalevets.com](http://www.scarsdalevets.com) or as Scarsdale Equine on facebook.



## AUTUMN EDITION

**XLVets** is a novel and exciting initiative conceived from within the veterinary profession. We are all independently owned, progressive veterinary practices located throughout the United Kingdom committed to working together for the benefit of our clients.

## XLVets Equine member practices

608 Farm & Equine Veterinary Surgeons  
 Alnorthumbria Veterinary Group  
 Ardene House Veterinary Practice  
 Belmont Veterinary Centre  
 Bishopton Veterinary Group  
 Calweton Veterinary Group  
 Capontree Veterinary Centre  
 Castle Veterinary Surgeons  
 Chapelfield Veterinary Partnership  
 Cliffe Veterinary Group  
 Clyde Veterinary Group  
 Donald S McGregor & Partners  
 Drove Veterinary Hospital  
 Endell Veterinary Group  
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 Hook Norton Veterinary Surgeons  
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 Parklands Veterinary Group  
 Penbode Equine Vets  
 Rosevean Veterinary Practice  
 Rutland Veterinary Centre  
 Scarsdale Veterinary Hospital  
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 Shepton Veterinary Group  
 St Boniface Veterinary Clinic  
 Thrums Veterinary Group  
 Wensum Valley Veterinary Surgeons  
 Westmorland Veterinary Group  
 Willows Veterinary Group  
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## THE EDITOR

# Welcome to the 'Autumn 2012' edition of Equine Matters...

...produced by XLVets Equine practices.

In this issue we focus on the respiratory tract with articles on nasal discharge, equine herpesvirus and recurrent airway obstruction with two real life cases of nasal discharge. We also feature suspensory ligament injuries with advice on managing your horse on box rest and controlled exercise following injury or surgery.

We have a four page 'London 2012 special' about the veterinary provisions and the involvement of our XLVets Equine members in this historic event.

Let's hope the thrill of what was achieved in British Equestrianism at London 2012 continues to inspire us all.

**Liz Mitchell** MA VetMB CertEP MRCVS  
 Scott Mitchell Associates



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XLVets Equine practices are taking part in the 'Talk About Laminitis' initiative which is running until the end of November 2012, visit [www.talkaboutlaminitis.co.uk](http://www.talkaboutlaminitis.co.uk) for more information and to download a voucher.

# London 2012

## A veterinary insight

We find out from XLVets Equine members about the veterinary provisions at London 2012 and about their experiences at this historic occasion.

### The application process

The application process for becoming a Games Maker Volunteer as a member of the veterinary services team began in October 2010. Following an interview and, for some, an online exam, the final selections were announced in December 2011.

### The training

An introductory event at Wembley Arena was followed by role specific training at Hackney College and finally the venue specific training at Greenwich Park. During training the veterinary team discussed logistical requirements and standard protocols for every eventuality. A test event in June 2011 over approximately half of the full course enabled the organisers to ensure that the logistics were workable.

Two days before the event there was a cross country dress rehearsal. Golf buggies were driven around the course as substitute horses. The driver would either shout 'clear' as they drove past the fence or pass the fence judge a slip of paper with the details of a scenario such as a horse fall for the emergency personnel to role play. This was an extremely worthwhile and important exercise, although at times hilarious.



### Veterinary services

The total numbers of horses competing at Greenwich Park were: 75 eventers, 60 dressage, 90 showjumpers, 77 paradressage and 55 modern pentathlon. There were 210 stables at Greenwich Park with a cycle of horses in and out organised according to the timing of the different disciplines. Providing emergency veterinary care for these horses during their stay was the veterinary field team with access to the onsite veterinary hospital.

An additional team of vets was brought in to cover the cross country day of the three day event.

The Federation Equestrian International (FEI) vets carried out random dope testing, thermography and hypersensitivity testing of horses with the aim of providing the clean sport essential at this level.

### The veterinary field team

The veterinary field team was deployed to provide first aid support for main arena events, all discipline competitions, horse trot ups and for the horses whilst unloading from lorries and when working out on any of the six all weather training areas including a five furlong canter strip. There was also 24 hour cover for any emergencies overnight. All the vets on site were given a radio and a veterinary kit bag containing bandaging material, sedatives and painkillers ready to perform immediate first aid.

The vet field team also carried out general health examinations of all competing horses at a type of quarantine station two miles from Greenwich Park called the 'Equine Staging Facility' (ESF) designed to ensure that there were no outbreaks of equine disease at Greenwich Park. At the ESF horses were

unloaded into temporary stables and checked by a vet for ID and general health and all lorries were security checked using a sniffer dog and cameras. Once all standards were satisfied, horses were reloaded and transported into the magnificent portable stables at Greenwich Park within the secure compound.

### Cross country vetting at Greenwich Park

There were a total of 32 vets plus technicians, physiotherapists, farriers and ambulance crews working on cross country day. There were 28 portable fences on the hilly terrain of Greenwich. Each fence had in attendance; a doctor, three fence judges, at least one veterinary surgeon and a veterinary assistant. There were six sectors which had a veterinary ambulance, a mobile cooling unit (huge fans blowing a fine mist of ice cold water over the horses), a hydration team, an emergency treatment team and a chaperone to escort horses from the course. An emergency team was waiting at the on-site vet clinic for any horses transported in the ambulance off the course.

The big day started with a briefing given by cross country veterinary controller Simon Knapp. Simon believed that this was the most experienced veterinary team ever assembled at an equestrian event anywhere in the world. He followed this by saying that there was an estimated television audience of two billion. The brief was to report any incident at our fence and inform control of our requirements, e.g. if we needed an ambulance.

Following this all vets and technicians were in place at their allocated jumps two hours before the official start.

## Lesley Barwise Munro BSc BVM&S CertEP MRCVS Alnorthumbria Veterinary Group



### Role:

Veterinary field team member and cross country vet team for fence 20 (the drop).

As a vet field team member I spent a day at the ESF health checking the show jumpers as they were arriving and was on duty at the main arena for the Grand Prix dressage.

### Vet report:

We had two fallers at our fence both horses and riders were unhurt. Fortunately the weather conditions were cooler but the undulating course with 39 jumping efforts and a tight time led to some tired finishers. In total only one horse had significant injuries suffering a bleed into the chest after a fall at fence 24. Thanks to the intensive care team at the fully equipped vet clinic on site at Greenwich Park and later the Rosssdales team at Newmarket, the horse went home fit and well a few days later.

## My London 2012 experience:

Being an Olympic volunteer vet for me was one of the best experiences of my veterinary career and the camaraderie with the vets, nurses, physios and farriers was second to none. I kept having to remind myself that I had a job to do as well as soaking up the atmosphere and admiring some of the best equine athletes in the world.

The crowds were phenomenal and certainly gave us advance warning when a GB team member was on the cross country course. Congratulations to our GB riders for their phenomenal performances at 2012 they were great ambassadors for our sport.

After watching Team GB Dressage with the mighty Valegro and Charlotte Dujardin on the Friday afternoon I took a train home later Friday night, and by 9.30 Saturday morning I had taken my youngest daughter to the Pony Club camp and was helping to put toilet rolls into the camp toilets - back to reality!

## Alan Walker BSc MA PhD VetMB DER MRCVS Hook Norton Veterinary Group



### Role:

Veterinary services team on cross country fence 3 (a combination).

### Vet report:

There were five incidents at fence 3; no horse was injured, but unfortunately one of the Canadian riders sustained a painful lower back injury.

## My London 2012 experience:

With spectators standing between five and ten deep around the course the atmosphere was electric. When our first British competitor, Nicola Wilson, blazed a trail the noise level went up, even higher when Mary King followed. The noise when Zara Phillips competed was very emotional.

My lasting memory came at the end as I walked out from the secure area following members of Team GB who were carrying their saddles back to the stables. As they emerged from the relative quiet secure area into the public gaze, three young girls were waving their flags furiously, when Mary King walked over to them and asked them if they would like a photograph with them. Although tired, the ladies were lovely, patient and kind, especially when within seconds other youngsters descended on them like a swarm of locusts. At this stage I said to Mary, 'This sight to me is worth GOLD'.



## Ali Butler BVet Med MRCVS Hook Norton Veterinary Group



### Role:

Dual role as a member of the vet field team and horse ambulance operator. Cross country vet team fence 12 (the chess board).

As a vet field team member I spent a day at the ESF checking horses in as they arrived for the Three Day Event and was 'on duty' at the training areas during the allotted times the riders could exercise. As horse ambulance operator I was in charge of driving the horse ambulance trailer onto the 'Field of Play' i.e. the Main Arena if necessary.



### Vet report:

The cross country fence caused no problems so I could enjoy listening to the amazing cheers that followed the riders around the course. With the horse ambulance fortunately I was lucky never to have to use my driving skills and therefore got to sit at the side of the main arena for the remainder of the eventing and all of the Show Jumping and Dressage competitions.

## My London 2012 experience:

I can't begin to explain how a park in London had developed into the most state of the art equestrian facility with every detail thought of and every equestrian need catered for. At the training areas I had a great opportunity to sit and watch the top horses and riders in the world go through their daily schooling routines.

I will never forget the tension and excitement of the team Show Jumping jump off. One moment there was total silence and the next just deafening noise as the crowd erupted and celebrated with their non-stop Mexican waves.

Both the dressage and the show jumping gave me the opportunity to be part of a medal ceremony complete with our National Anthem - not a dry eye in the whole arena. I will never forget this and probably never get to experience it ever again first hand. I am very proud to have been a part of what was truly an amazing event put on by our country and to see our best equestrians at the top of their game. Truly unforgettable, a lifetime memory.

## David Rowlands BVSc CertEM MRCVS Penbode Equine Vets



### Role:

Cross country vet team fence 4 (The Royal Herb Garden, a parallel brush fence and the largest on the course). I was one of four vets tasked with reporting on every horse as it passed my fence.

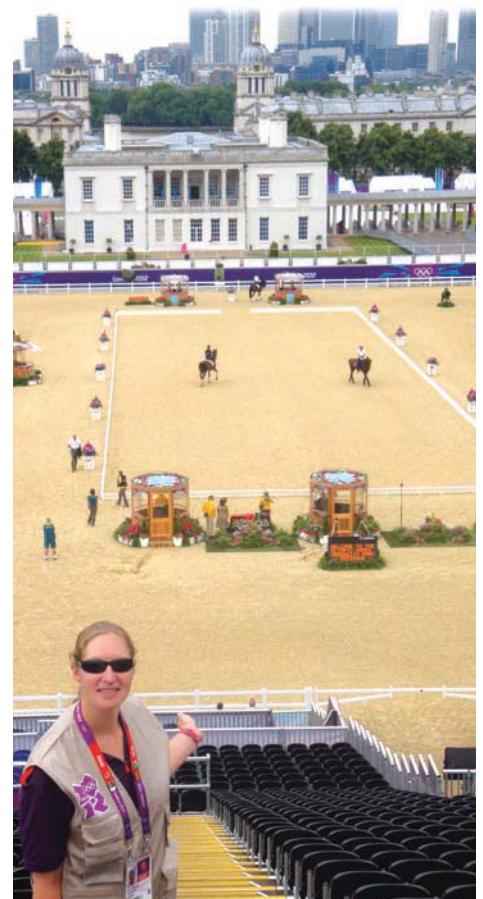
### Vet report:

Fence 4 rode extremely well. There were a few incidents for the vets to attend, but our system and team work went to plan.

## My London 2012 experience:

You could always tell when a British horse was on the course because a Mexican wave of cheering followed it around the track. On crossing the finish line the noise was like a goal being scored in a football match!

The atmosphere was amazing with spectators and officials being upbeat and thrilled to be there. The back drop of Canary Wharf as horses galloped by was quite surreal. At the end of the day, as I returned my back pack of veterinary equipment to the veterinary centre, I breathed a sigh of relief and felt a real sense of pride. Proud that our system and protocol had been effective. Proud to have been part of a once in a lifetime experience. Proud to be British.



**Marie Rippingale**  
 BSc (Hons) REVN G-SQP  
 DipHE CVN  
 Scarsdale Veterinary Group



### Role:

Veterinary Technician assisting the veterinary field team and team vets at the vet clinic at Greenwich Park and assisting with providing first aid support to the main arena and training areas. Cross Country Vet Technician fence 20 'The Altar'. I also attended the modern pentathlon stables to help check over the horses on arrival.

### My London 2012 experience:

Going to the Olympics had always been a dream for me although I had always hoped to be an equestrian competitor. Having realised that my 28 year old pony may not make it round the cross country course at Greenwich, I had to find another way to be involved. Being behind the scenes at such an iconic event was a dream come true, you never knew when one of your favourite riders or horses would appear round the corner. I had the honour of watching the British eventing team win and collect their silver medals which is something I will never forget. I feel very proud to have been part of the vet team at London 2012. Working with the riders, horses and other volunteers was a real privilege.



# Physiotherapy at London 2012



**Rachel Greetham BSc(Hons) Physiotherapy**  
 MCSP, HPC Category A member ACPAT

For the first time at an Olympic and Paralympic games there was a team of chartered equine physiotherapists available for any individual or team to use.



There was full physiotherapy cover from 6am to 10pm. We were there to help with horses that had any problems travelling or had ongoing problems. It was a real team effort, working closely with the veterinary team, horses were often visited by all four physios covering the day and had frequent visits from the farriers offering their expertise (in exchange for a cup of tea!)

Good communication skills were essential especially as there were many different languages to contend with.

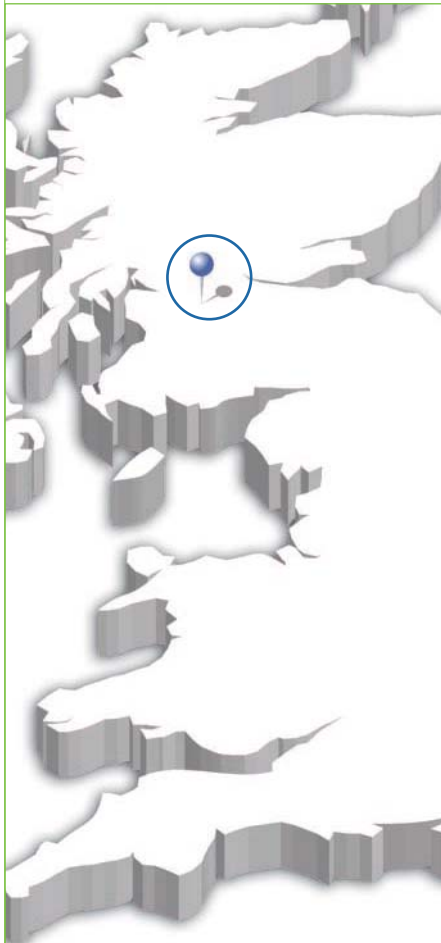
Many of the horses didn't receive routine physiotherapy for maintenance in their home countries and relished free treatment and our expertise. Their knowledge and appreciation of the benefits of physiotherapy has increased significantly. This also posed an additional challenge to our work as many of the horses had pre-existing musculo-skeletal problems which were chronic. We had to modify our treatment techniques and quickly gauge how sensitive the horses were to minimise post-treatment soreness. What we do to keep the horse at their peak in competition is different to what we do to prepare or once the event is over, it really is just about keeping the horse as flexible and supple as possible.

### Common conditions treated were:

- muscular back and neck pain, including post-competition soreness
- haematomas
- bruised feet
- coffin and fetlock joint problems
- sacroiliac joint strains
- muscle tears
- ligament and tendon irritation
- superficial wounds and grazes
- trauma.

Equine physiotherapy was also in high demand at the Paralympics. Here a huge part of our job was to understand the disability of the rider so that we could interpret some of the muscle tensions and soreness in their horse in what the horse 'needed' in order to help balance itself with their rider and what was alright to release and work through. Being both a human and an equine physio was absolutely invaluable for this.

**The games have given us all a great opportunity to observe elite competition horses from all walks of life and different training styles in dressage, show jumping and eventing.**



Veterinary Surgeon **Louise Cornish**

XLVets Equine Practice **Clyde Veterinary Group**



# Suspensory ligament disease in the horse

Louise Cornish BVMS CertEP MRCVS, Clyde Veterinary Group

The suspensory ligament in the horse supports the fetlock and is very prone to injury in many breeds and ages of horses. Inflammation of the ligament (desmitis) is increasingly recognised as a cause of lameness in sports horses especially. This article aims to give some background information regarding the anatomy of the ligament, the areas which are susceptible to damage, how the condition can be diagnosed and what treatment is available.



## Anatomy

The suspensory ligament originates at the top of the back of the cannon bone, just under the knee or the hock, travels downwards between the splint bones and then divides into two branches to attach onto the sesamoid bones at the back of the fetlock joint. The origin of the suspensory ligament is also known as the proximal suspensory ligament. The middle part (the body) also contains some muscle tissue which can become stronger with training. The two branches which join onto the fetlock can also be injured.

Smaller, less significant extensor branches then travel to the front of the pastern where they join the extensor tendon. These are rarely damaged and will not be discussed further here. Several short ligaments run from the base of the sesamoid bones (at the back of the fetlock joint) down the back of the pastern. These are part of the suspensory apparatus and can be a source of lameness.

Like all ligaments and tendons in the body, the suspensory apparatus is subject to overload and strain. It acts as a sling for the fetlock in the fore and hind limbs. It is more likely to be injured in older horses and in horses with a straight hindlimb conformation. Often both limbs are affected.



The suspensory ligament can easily be seen and felt in the mid cannon region (between the arrows)



### Proximal suspensory desmitis (PSD)

The origin of the suspensory ligament is put under strain particularly in sports horses which are required to engage their hindquarters, and especially in those that are trained on soft surfaces. Microscopic damage to the collagen fibrils builds up over time and causes long-term (chronic) changes in the ligament. Lameness can then gradually develop (often initially seen as poor performance) or may suddenly occur as a result of an acute tear of the ligament in an already weakened area.

Sometimes a small piece of bone can be pulled (avulsed) off the back of the cannon bone, which can be detected on x-ray.

The prognosis for horses to return to full soundness is better in the forelimbs than the hindlimbs. Unfortunately, many of the chronic injuries do not fully heal or recur when exercise restarts.



Ultrasound scans showing fibre disruption in the proximal suspensory ligament

### Suspensory body desmitis

The central part of the suspensory ligament is most commonly injured in thoroughbred and standardbred racehorses, but pleasure horses can also be affected. It is important to be vigilant when checking for swellings in the limbs after exercise as often lameness may be mild or absent in these cases. Heat and swelling can be felt mid-cannon region in front of the main flexor tendons. Sometimes the splint bones can be damaged by the swollen ligament so x-rays are often taken to check for this.

Usually the ligament will heal but re-injury can occur.

### Desmitis of the branches of the suspensory ligament

These can also feel warm and swollen if damaged. Again, lameness is not always present so it is worth investigating any swellings around the back of the cannon/fetlock region. Horses are more likely to strain the branches if the foot is not correctly balanced. All types of horses can be affected.

Unfortunately, re-injury is also common if the branches are severely damaged.

### Breakdown of the suspensory ligament in older horses:

The collagen in ligaments and tendons becomes weaker with age. In geriatric horses, the suspensory ligament gradually stretches and becomes less elastic, especially in the hindlimb. The fetlock has less support so moves lower towards the ground. This can be painful and the horse may shift weight from foot to foot more often than is normal. Anti-inflammatories can be used long term in these cases. Unfortunately, the suspensory ligament can break down completely in very severe cases and euthanasia may be the most humane option.



Straight hock and low fetlock conformation associated with a weakened suspensory ligament in an older horse

### Diagnosis

Usually, a combination of clinical examination and further tests are needed to make an accurate diagnosis. A flexion test will often worsen the lameness if PSD is present. Nerve blocks, using local anaesthetic to desensitise the nerve serving the suspensory ligament, can be instrumental in localising the source of the lameness.

Ultrasound scans can show a variety of changes in the suspensory ligament and shorter ligaments at the back of the pastern, including enlargement, focal damage or widespread degeneration. X-rays are used to check for damage to the cannon bone, splint bones or sesamoid bones. Occasionally, a bone scan (nuclear scintigraphy) is required to make a diagnosis.

### Treatment

Where an acute (short-term) injury is present, anti-inflammatory therapy is useful to reduce the ongoing damage to the ligament. This can include bandaging, cold hosing, ice packs and in-feed anti-inflammatories such as bute. Box rest is essential at this stage.

With chronic injury, treatment is usually based around rest and controlled exercise. Free exercise is often not permitted in order to give the ligament a chance to heal without being re-restrained. Some exercise can help, though, as it encourages the new collagen fibres to align themselves in an ordered longitudinal formation. The repaired ligament will not be as strong as the original ligament, and may never look normal on ultrasound scan. The ligament is likely to take several months to heal, perhaps up to one year or even longer in rare cases.

PSD can be particularly difficult to treat, especially in the hindlimbs. Extracorporeal shock wave therapy can help to reduce the local inflammation and improve the long term prognosis. A few cases may be suitable for surgical treatment if other methods fail. Even if a horse does not recover well enough to return to its original use, it may manage to work at a lower performance level.

Good farriery will help to maintain correct foot balance and appropriate shoeing will provide some support to the function of the suspensory ligament.



Veterinary Nurse Sarah Baillie

XLVets Equine Practice Ardene House Veterinary Practice



Sarah Baillie REVN, Ardene House Veterinary Practice

# Managing the horse on box rest

The thought of keeping your horse on box rest is a terrifying one for most owners, it conjures visions of a stressed, un-manageable horse but it doesn't have to be that way. With some careful consideration to diet, stimulation, companionship and your horse's individual likes and dislikes, the box rest period could be hassle-free and pass more quickly than you thought possible.

## Stabling

The first consideration should be stable selection; if your horse is upset by other horses coming and going then a quiet isolated stable would be ideal. However if watching other horses keeps him entertained then a stable in a busy area may keep him occupied. As well as being warm and dry the stable should be well ventilated to keep dust exposure to a minimum.

## Feeding

Food provision is an important consideration. Eating from the floor is ideal as it mimics their natural grazing behaviour but this is not always practical and a compromise may need to be reached. This could be feeding hay from a net or rack but also scattering food and treats in the bed to allow the horse to forage.

Horses on box rest are at increased risk of colic due to decreased gut motility from lack of exercise, reduced grass intake and provision of a dry diet. Firstly your horse's plane of nutrition should decrease in direct proportion to the reduction in exercise. Most horses on box rest will require a purely fibre based diet with addition of a vitamin supplement or balancer. Dry food can cause impaction colic so wetting feed and hay and encouraging drinking is important.

An adult horse requires 50ml of water per kg bodyweight a day and if this is not met drinking should be encouraged. Some horses prefer warmed water; the addition of fruit juice to water can make it more appetising. Access to a salt lick or salt in the horse's feed can also encourage drinking.

## Tackling boredom

Boredom is often the biggest issue for horses on box rest but there are many possible solutions.

Feeds and hay should be split into as many helpings as possible to provide entertainment. To slow down a fast eater try placing a clean brick or salt lick in the feed bucket and make hay last longer by wrapping in two small-holed haynets within each other.

Horses usually benefit from a companion but not necessarily another horse; some horses enjoy the company of a goat or sheep. Shatterproof stable mirrors are available which allow the horse to see its reflection and think

it has company or simply leaving a radio on can help. Hanging toys, floating toys in the water bucket, treat balls and licks are all very useful.

One thing not to be overlooked is grooming and 'TLC' to stimulate and entertain your horse. If all else fails oral calmers or sedatives can be considered but this should be a last resort after discussion with your vet.

One final consideration is what happens next. When the box rest period is over and your horse can finally be turned out do so carefully, with sedation if necessary, the last thing anyone wants to see is all of your hard work undone by a gallop around the field.



1. A period of box rest may be necessary for recovery associated with an injury or surgery



2. Grooming will stimulate and entertain your horse

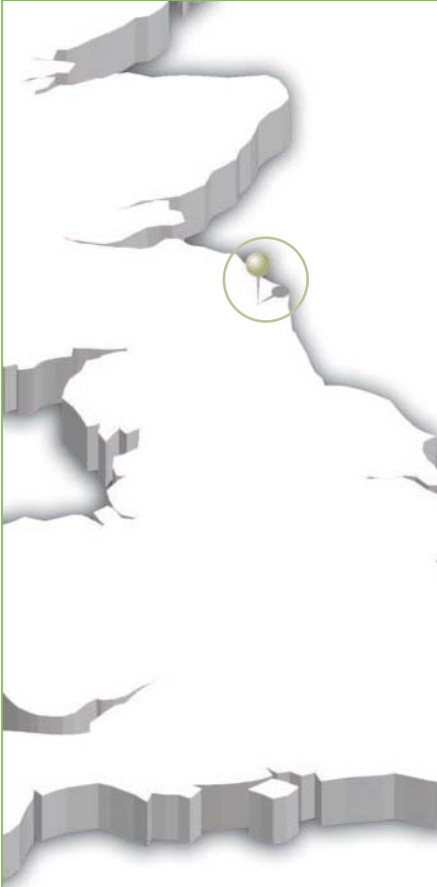


3. Doubling up haynets can make food last longer

## NURSING FEATURE...



alnorthumbria  
veterinary group



Veterinary Nurse Sarah Holmes

XLVets Equine Practice Alnorthumbria  
Veterinary Group



Sarah Holmes RVN REVN, Alnorthumbria Veterinary Group

## Managing your horse on controlled exercise after box rest

It is important to have a controlled exercise programme for your horse after it has had a period of box rest as the ligaments, tendons and muscles of the horse can become weak and slack. To prevent any recurrence of injury, or further injury to the horse, there needs to be a controlled build up programme before returning to full exercise, or before turn out to pasture.

### Preparation of the horse:

- feet trimmed and re-shod if normally shod - to prevent feet breaking up;
- physiotherapy - help stimulate the muscles which may have become tight from standing in a stable;
- saddle - have the saddle fit checked as there will have been some muscle loss over the saddle region.

### Safety and management

Safety of you is important as some horses can 'explode' on the first time out of the box as they can see this as a break for freedom after being encased in four walls.

The following equipment should be used when handling the horse:-

- bridle or chiffney
- lunge line
- riding hat
- gloves
- over reach boots
- tendon boots.

Avoid taking the horse out for the first time on a windy/blustery day as this can raise excitement levels.

It may be safer with some horses to start exercise under saddle rather than in-hand.

### Diet

Feed the horse on a convalescence diet without adding in any carbohydrates and starch to prevent the horse from becoming over excited (fizzy) and also to reduce the risk of the horse suffering from exertional rhabdomyolysis (ERM/'tying up'/'azoturia') as it is brought back into work. Adding calming supplements such as magnesium or tryptophan may help to prevent the horse from becoming over excited on the first time out of the stable.



Pictures supplied by Ivy House Stables

### Drugs

If your horse is particularly excitable, a sedative called acepromazine (ACP) can be administered prior to the first time out of the stable. If necessary it can be used at a high dose for the first time out and can then be gradually reduced over a couple of days once the horse has settled into a routine. Speak to your vet and they will be able to advise if its use would be appropriate and what dose to use.

### Exercise

Walk exercise should normally be started for short periods of about five minutes and slowly built up. Fitting this into a busy day's work can sometimes be hard to do. There are other options which after discussion with your vet could be introduced to the exercise programme:

**Horse walker** - allows you to do other jobs while your horse is being exercised, but check first with your vet as this may not be suitable in the early stages following an injury.

**Swimming** - if there is a horse pool locally a short period in the pool can be equivalent to half an hour of walk exercise and it reduces the strain on joints and ligaments.

**Rehabilitation centres** - these can be found around the country where the horse could be sent to follow a rehabilitation programme. Facilities may include:

- treadmill exercise
- swimming
- solarium
- different types of surfaces to prevent exertion on the injury.



Veterinary Surgeon **Dominic Alexander**

XLVets Equine Practice **Belmont Veterinary Centre**



**Dominic Alexander BSc BVMS MRCVS**, Belmont Veterinary Centre

The eyes on all wild and domestic horses and donkeys are large and placed on the corners of the head giving them almost a 360 degree field of vision. The size and prominence of the equine eye means that disease and injury to the equine cornea is a common occurrence. Many incidences are minor and heal before they come to our attention.

# Equine corneal disease

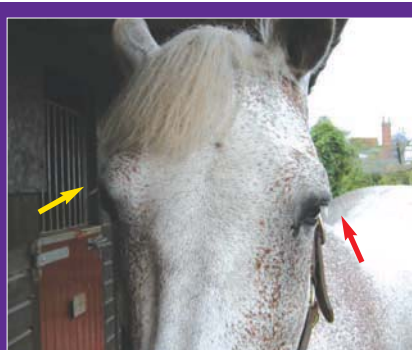
## What is the cornea?

The cornea is the transparent front part of the eye that covers the iris, pupil and anterior (front) chamber. The anterior chamber is the fluid-filled space inside the eye between the lens and iris, and the inner surface of the cornea. The transparent nature of the cornea, and the lens, allows light to pass through the eye to the back of the eye.

The healthy cornea is surprisingly robust considering that it is less than one millimetre in thickness. This thin structure comprises of several layers. The outer membranes of the cornea are highly innervated with nerve fibres which makes any damage to the cornea very painful.

## Assessment of the eye

Occasionally dust or any sort of debris can get into the eye and cause irritation. Excess tear production, a mucky discharge or even some squinting of the eyelids may be seen. Wiping the eye with a piece of kitchen towel soaked in warm water may be all that is required to remedy the problem. Using proprietary human eye washes can help soothe the eye. Salt water or cold tea, are sometimes used but they can dehydrate/dry out the cornea if strong concentrations are used doing more harm than good.



**Figure 1** - note the eyelash on the affected left eye (red arrow) is angled downwards in comparison with the eyelash on the normal/healthy right eyelid (yellow arrow)



**Figure 2** - much of the front (anterior) part of the eye, including the cornea, can be examined with a small torch

## Corneal disease - signs to look out for:

- squinting/closing of the eyelids
- excess tear production
- sticky cream/grey discharge in the corner of the eye
- loss of the smooth shiny finish of the cornea (this is particularly noticeable when the eye is 'back lit' (see Figure 2) using a small torch with the beam directed towards you)
- reddening around the edges of the eye
- rubbing the eye
- increased sensitivity around the eye.

## Diseases of the cornea

- **corneal ulceration** - damage to the surface or deeper layers of the cornea
- **keratoconjunctivitis sicca (dry-eye)** - failure of tear production leading to a roughening of the corneal surface
- **tumours** - e.g. squamous cell carcinoma
- **keratitis** - inflammation of the cornea (Figure 3).

Corneal ulceration is the most frequently occurring equine corneal condition. Most corneal ulcers are due to bacterial infection, even if it was not the initial cause. Fungal and viral infections can also occur but are less common.



**Figure 3** - keratitis in a donkey. Note the opaque/cloudy cornea and tiny blood vessels running across the surface



**Figure 4** - a corneal ulcer after fluorescein stain has been applied



**Figure 5** - the corneal ulcer above after the edges were debrided

Corneal ulcers often have a flap of dead tissue overlying the edges (Figures 4 and 5). Removing this tissue (debriding) under sedation and local anaesthetic will initiate or assist healing by allowing the cells to migrate across the ulcer - the direction of healing occurs from the outside edge inwards.

## The treatment of corneal ulcers:

- antibiotic eye ointment or drops;
- pain relief - injectable and oral pain killer anti-inflammatories (e.g. phenylbutazone);
- autologous serum drops - the patient's own serum is collected from a blood sample and stored in the refrigerator to be applied to the affected eye;
- antibiotics given by injection or in feed may be used in some cases.

Applying serum to the eye (autologous meaning the patient's own) might appear an odd thing to do. Serum and other agents such as EDTA, are given to reduce the damaging effect that the enzymes contained in the tear film can have on the ulcer.

## Equine corneal disease: key complications

- Corneal ulceration is the commonest equine eye condition and progression to more complicated corneal disease is more common than in other domestic species.
- The equine cornea is uniquely slow to heal in comparison with other species.
- Diagnosing and treating a diseased/injured eye can be very challenging depending on the size and temperament of the patient.
- The equine patient has a very powerful blink reflex meaning that opening the upper eyelid to examine the eye and apply topical medication can be difficult.

## Contact lenses

Some cases may benefit from having a soft contact lens applied. They are often called bandage lenses because they protect the cornea, particularly from the rubbing of the eyelids. The lenses are porous allowing medication to pass through. The correct size must be fitted otherwise they will just aggravate the eye or fall out. They are relatively expensive too so need to stay in for several days to justify the expense.



**Figure 6** - a soft bandage contact lens, the green emblem is just visible

## The sub-palpebral lavage system

If your horse is compliant and you are able to get the medication in, a lavage system will not be necessary. However, getting medication into the eye can sometimes be very difficult so using a lavage system (Figures 7 and 8) can be a great help. It can be placed in the upper eyelid or the lower lid.



**Figure 7** - a lavage system fitted and stitched in place



**Figure 8** - showing the lavage system threaded through the plaited mane. The green arrow shows the portal where medication is injected

## IN SUMMARY:

- eye conditions can be very serious, if concerned, always seek veterinary advice;
- seek veterinary attention if the eye does not quickly improve after cleaning or does not respond to treatment recommended by your vet;
- corneal ulcers should always be treated aggressively no matter how small they appear to be;
- always inform your vet if you are unable to get the drops into the eye, alternative methods of medication can then be found;
- your horse, pony or donkey may be left with some corneal scarring; this is cosmetic and shouldn't necessarily be seen as a poor outcome.



Joe Ivey BVSc MRCVS, Rosevean Veterinary Practice

# Nasal discharge

## The snotty nose!



If you have been around horses for any period of time you will have seen a horse with nasal discharge at some time. Nasal discharge can result from inflammation or bleeding in any part of the respiratory tract.

### The respiratory tract involves:

- the nose and nasal cavity with the air-filled bony cavities in the skull called the sinuses which communicate with the nasal cavity;
- the throat (pharynx) and the air filled guttural pouches which sit on either side of the throat;
- the larynx which forms the junction between the windpipe (trachea) and the pharynx;
- the windpipe and the lungs which comprise of dividing airways (bronchioles) like the branches of a tree and the air sacs (alveoli).

There are many other less common causes which may present with either a unilateral (one-sided) or bilateral (both sides) discharge. If the nasal discharge is unilateral it generally means the source of the problem is in front of the pharynx where both sides of the nasal passages communicate. However, a bilateral nasal discharge can come from any part of the respiratory tract.

The nasal cavity and airways are lined with cells that produce mucus and have tiny hairs that together trap particles and transport them upwards to help protect the delicate air sacs. If the airways become infected or inflamed for any reason then an increased amount of mucus is produced this can appear at the nose as a thick discharge.

The commonest causes of respiratory tract inflammation are viral, bacterial and allergic respiratory disease all of which can present with nasal discharge among other symptoms.



Veterinary Surgeon **Joe Ivey**  
 XLVets Equine Practice **Rosevean Veterinary Practice**



**Some common causes of nasal discharge:**

Unilateral	Bilateral
Sinusitis (infection/inflammation of the sinuses)	Viral or bacterial respiratory infection
Tooth root infection/abscess	Allergic respiratory disease e.g. recurrent airway obstruction (RAO)
Tumour	EIPH (Exercise induced pulmonary haemorrhage)
Guttural pouch infections	Pharyngitis
Strangles	Pneumonia
	Guttural pouch infections
	Strangles

**Diagnosis:**

In order for us to work out what is causing the discharge we need to consider the age of the horse, the breed and use of the horse, the history of the problem and perform a physical examination.

**Age:** Certain conditions will only be relevant in very young or new born foals such as a cleft palate. Otherwise age can give an indication as to the likelihood of a condition but it is not set in stone. For example, viral and bacterial respiratory infections are more common in young horses whereas nasal tumours are more common in older horses.

**Breed and use:** A thoroughbred race horse is more likely to get exercise induced pulmonary haemorrhage (EIPH) post racing; a condition in which the horse bleeds into the lungs during galloping. In general competition horses are more likely to come into contact with viral infections.

**Type of discharge:** The appearance of the discharge can often give clues to the cause. A clear mucus-like discharge is often seen with a viral infection or in allergic respiratory disease. A yellow or green discharge suggests a bacterial infection which could originate from any site in the respiratory tract or be secondary to another cause of inflammation e.g. viral infection. A one-sided discharge that is very smelly often suggests a tooth root infection. A bloody discharge can be associated with EIPH, trauma or a tumour of the ethmoid bones at the back of the nasal cavity. Swallowing disorders can result in a nasal discharge containing food material.

**Other signs:** The presence of other signs will also assist with localising the source of the discharge, for example with infections the horse will often also have a raised temperature and be unwell whereas a horse with an allergic condition will be physically well. Conditions involving the sinuses often result in facial swelling. A full physical examination will examine the respiratory tract and the mouth to identify abnormalities.

**In some cases further diagnostic procedures are required:**

**X-rays** - fluid lines present in the sinuses or guttural pouch, changes around a tooth root, or masses in the nasal chambers may help indicate where or what the problem is.

**Respiratory tract endoscopy** - by passing a small camera up the horse's nose we can visualise the nasal chambers, guttural pouches, pharynx, larynx and upper airways and we can also use this to take samples from these structures if required.

**Bacteriology** - this involves taking swabs and or washes from potentially infected areas and culturing the bacteria that may be present.

**Blood sample** - haematology and biochemistry can show us what the white and red blood cells are doing which may indicate a certain type of infection, blood loss, or associated systemic disease.

**Cytology** - involves looking at cells from samples collected from the lungs or windpipe, by washing sterile saline into the airway then drawing it back. The resultant fluid can be analysed to see what sort of cells are present and therefore what sort of problem may be present.

**CT imaging of the skull** - gives a three dimensional x-ray image of the skull which can help diagnose more unusual conditions such as tumours.

**Treatment:**

The treatment for nasal discharge will depend on the cause. Viral conditions may simply require rest and anti-inflammatories, bacterial infections will often additionally benefit from antibiotic treatment and some sinus conditions may require surgery and flushing using an indwelling catheter. Most conditions will benefit from some management changes to assist the resolution of the nasal discharge:

- feed from the floor to assist natural drainage of the respiratory tract and sinuses;
- turn out as much as possible;
- stop ridden work;
- if the horse is unwell keep it in isolation to prevent the spread of infectious disease;
- use dust-free management to reduce the irritants to the respiratory tract.



Grazing and feeding from the floor assists the drainage of discharges from the sinuses and respiratory tract

**Please remember that in the majority of cases nasal discharge is not a serious problem. In most cases it is likely to be a mild respiratory infection but if you do see some of the more serious symptoms such as a unilateral, purulent, bloody, smelly discharge or any other signs of disease then it may warrant earlier intervention by your XLVets Equine practice.**

# Case Study: Nasal discharge



Liz Mitchell MA VetMB CertEP MRCVS, Scott Mitchell Associates

Poppy, an eight year old Welsh pony mare, developed a smelly discharge from her right nostril (Figure 1) but was otherwise well in herself. After an initial course of in-feed antibiotics, the discharge had reduced in amount and smell but not gone away; and after stopping the antibiotics it worsened again.



Figure 1 Poppy had a smelly discharge down her right nostril

On examining Poppy, other than the nasal discharge and slight swelling in her lymph nodes under her jaw on the right side, no other problems were found. In her mouth just a few sharp edges on her molar teeth were found.

A nasal swab was negative for the strangles bacteria. A small flexible camera (endoscope) was used to examine the respiratory tract. It revealed that the discharge was draining from the sinuses (bony cavities in the skull) into the nasal cavity. X-rays of the head showed fluid in the sinuses on the right side and changes around the root of the fifth cheek tooth indicating a tooth root infection (Figure 2).



Figure 3 The tooth and forceps after extraction

The molar teeth of horses grow throughout their life so in a pony of this age there was a long root (Figure 3). After just over an hour the tooth was loose enough to be extracted. The socket of the tooth was flushed clean and a plug of dental wax was inserted to prevent food packing into it. Under local anaesthetic a small hole was made in the bone on the front of the head at the level of the eyes and a catheter fed into the sinus and stitched in place. Saline could then be flushed through the catheter to wash out the sinus and the fluid freely drained out of the right nostril. Although this sounds very unpleasant the horses tolerate it extremely well. Twice daily flushing of the sinus was continued for a week until the sinus flushed clear. The catheter was then removed and the hole allowed to heal over. Follow up x-rays showed the sinus infection was resolving well (Figure 4). A clear discharge persisted for a further week then resolved.

Poppy returned to pony club activities and has her teeth examined and rasped every six months to prevent any problems occurring due to her missing tooth.



Figure 2 The changes around the root of the fifth cheek tooth indicate a tooth root infection

Further examination of the teeth, in light of the x-ray findings, revealed a small gap (diastema) between the fifth and sixth cheek tooth containing rotten food material. It was likely that infection had spread up between the teeth to infect the root. The root of this molar tooth sits within the sinus so root infection leads to infection in the sinus (sinusitis). This results in the smelly nasal discharge seen in this case. Due to the severity of the infection present it was decided to remove the molar tooth.

Poppy was sedated using a sedative drip to keep her sleepy over an extended period of time and given some morphine and anti-inflammatories for pain relief and some antibiotics to control the infection. The tooth was removed using forceps attached to the tooth and a prolonged rocking motion used to gently loosen the tooth without breaking it.

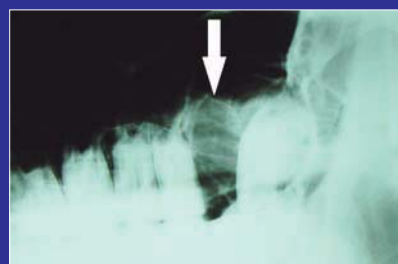


Figure 4 After treatment: showing complete removal of the tooth

Scott  
& Mitchell  
Associates  
VETERINARY  
SURGEONS



Veterinary Surgeon Liz Mitchell  
XLVets Equine Practice Scott Mitchell Associates



# Case Study: Nasal discharge; a bleeding nose



Vicky Rowlands BVM&S CertEP MRCVS, Willows Ashbrook Equine Hospital

Nosebleeds (or epistaxis) in horses can be caused by trauma, tumours or fungal infections in the guttural pouches (two small sac-like areas at the top of the throat). In some cases, nose bleeds can be life threatening so it is important to seek veterinary advice.

Kero Lad is a five year old thoroughbred gelding starting his ridden career. He was being investigated for gastric ulceration; however, the owner also described that a small nosebleed had occurred the previous week. Other than a few small, healing grazes on his head, Kero Lad was not showing any other symptoms so the nosebleed was attributed to a minor trauma.

Three weeks later Kero Lad returned as a large swelling had appeared within 24 hours. It was round his left eye, extending towards the middle of his head and seemed to be extremely painful. In the previous five days, the owner had seen occasional trickles of blood from his right nostril, which had gradually become yellowy-brown.

We x-rayed and ultrasound scanned his head and found he had fractured his skull across his frontal bones (between his eyes). The images showed multiple, tiny chips of bone lying

along the fracture line. He had obviously given his head more than a gentle bump! The fracture was right over the air-filled sinuses of the head so blood and infection from the fracture site had been draining from the sinuses into the nasal passages.

Small chips of bone can stop healing as they die off and become a focus of recurrent inflammation and infection. These small chips are called sequestrae and can either become incorporated into the healing fracture and cause no further problems, or they can require surgical removal. In Kero Lad's case, although surgery was discussed, the fragments looked so small we opted for the conservative treatment option of antibiotics and strong anti-inflammatories. Within 72 hours the swelling was receding and Kero Lad was allowed home for his owners to continue treatment.



Figure 2 Kero Lad following surgery

This allowed us open the skin then 'debride' or scrape away all the dead bone and tissue before closing the wound. As the fracture line was so extensive, we had to do this in three different sites. Kero Lad was hospitalised for a further four days after which he was sent home with antibiotics. The wound healed without any problems and no further nasal discharge was seen.



Figure 3 Five months after surgery the site was well healed with just a small lump visible



**ASHBROOK  
EQUINE  
HOSPITAL**

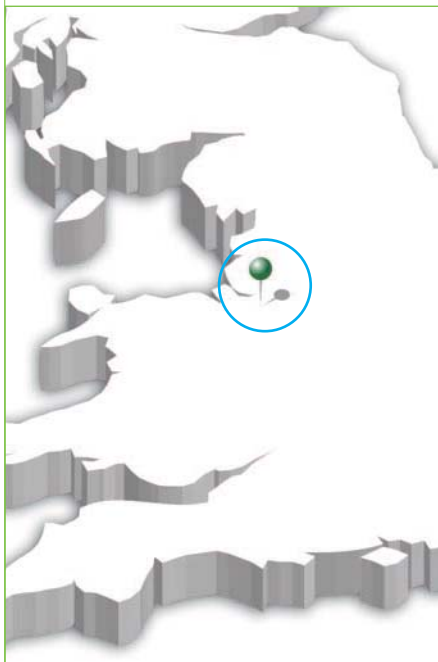
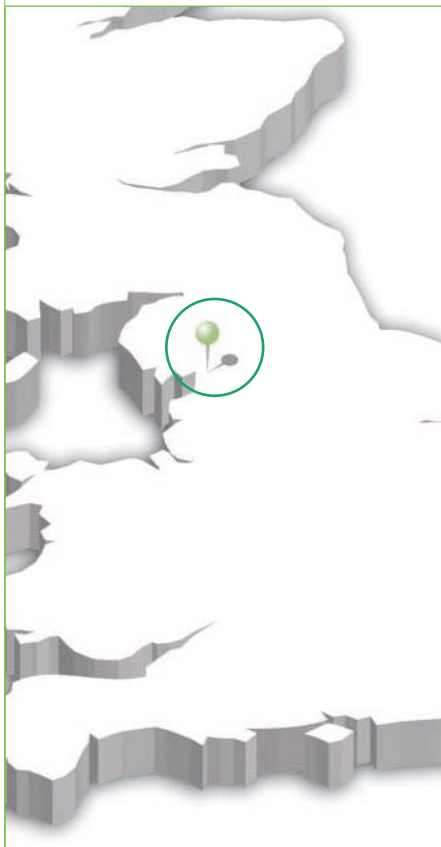


Figure 1 The x-ray showed a fractured frontal bone with chips visible (arrow)

Unfortunately the swelling returned within two weeks so Kero Lad was re-admitted and the area re-imaged (see Figure 1). At this time, on x-ray, there were some bigger chips of bone visible and they could be seen 'floating' within areas of fluid when we ultrasound scanned the area. This suggested the chips were still causing problems and required surgical removal.

The surgery was done under standing sedation and local anaesthetic to reduce the risk associated with general anaesthetic.

Veterinary Surgeon	Vicky Rowlands
XLVets Equine Practice	Willows Ashbrook Equine Hospital



Veterinary Surgeon **Jane King**

XLVets Equine Practice **Westmorland Veterinary Group**



Jane King B VetMed MRCVS, Westmorland Veterinary Group

# Recurrent airway obstruction (RAO)

Recurrent airway obstruction (RAO) is a condition that has been known to affect horses for as long as horses have been domesticated. Over the centuries, RAO has been given a number of names including broken wind, heaves and more recently chronic obstructive pulmonary disease or COPD. It is a common condition and can seriously compromise an affected animal's health and ability to work. Any type of horse or pony can suffer from RAO.



## What causes RAO?

Heaves or RAO is caused by an allergic reaction to dust, moulds, fungal spores and bacteria in the lung of the horse. The airways or bronchii and bronchioles in the lung are lined by cells which produce mucus in response to exposure to these allergens. These lining cells are surrounded by a collar of smooth muscle. Affected horses have an inflammation of these airways characterised by constriction of this smooth muscle causing a narrowing of the airways along with overproduction of mucus and secretions. In long term (chronic) cases the lining of the airways becomes thickened and inflamed further obstructing air flow through the lung.

## What are the signs of RAO?

The narrowed airways in horses with heaves mean it is harder work for the horses to breathe normally, these horses breathe harder and faster than normal. They may have a 'heaves line' running along their belly from all this increased respiratory effort. The extra mucus production and narrowed airways often cause the horse to have a cough. Because this mucus is thick and sticky it often accumulates in the base of the trachea or

windpipe, when the horse starts to exercise this may be coughed up. Sometimes these deposits of thick yellow phlegm may be coughed up over the stable door. Occasionally the horse may have a slight nasal discharge. Unlike infectious causes of a cough the horse is usually well and with a good appetite. Milder cases may present with poor performance as the signs may only become apparent during hard work.



## How do vets diagnose RAO?

To help your vet in their diagnosis they will ask questions about the signs your horse is showing and how he is kept. They will examine the horse and listen to his chest, at rest and perhaps after exercise or using a rebreathing bag to exaggerate lung sounds. Sometimes the vet will want to use an endoscope (flexible camera) to look down the horse's airways or take samples of the lung secretions by flushing sterile saline into the airway and then sucking it straight back out. This is called a tracheal wash or bronchoalveolar lavage (BAL) depending on the technique used. The samples obtained are examined under the microscope to look for certain cells characteristically found in horses suffering from RAO.

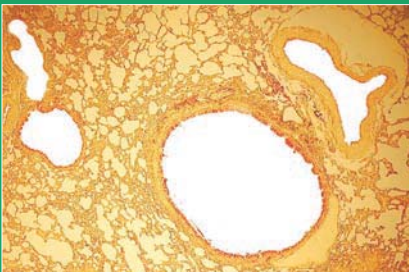


Figure 1 - A section of lung showing the small airways that become narrowed in RAO



Figure 2 - Endoscopy: a small flexible camera is inserted into the windpipe



## How do you treat a horse with RAO?

As always prevention is better than cure. In fact this is a condition for which there is no cure, once a horse has developed signs they are more likely to have another attack (the clue is in the name - RECURRENT airway obstruction). It is not something horses grow out of, rather, RAO tends to get worse with age.

The most important treatment for affected horses is environmental management to reduce their exposure to dust and allergens. Additional treatments used include clenbuterol which is given in feed and can help widen the airways by relaxing the smooth muscle around the bronchioles (airways) making it easier for the horse to breathe. Steroid anti-inflammatories are very effective in the management of severe and long term cases, these may be given by mouth in tablet form, by injection (especially if the horse is having a bad attack) or by inhaler, in the same way that human asthmatics medicate themselves. A variety of equine inhaler spacer masks are available to use with the multi-dose inhalers. Although the presenting sign in horses is a cough, the use of cough medicines is of little benefit.

Well controlled and with proper treatment many horses can return to work at the levels they did previously, but exposure to the allergens (e.g. dusty hay) for even a short period of time can cause a relapse.



## TOP TIPS... for management of horses with RAO:

if at all possible have your horse living out all the time;

- if stabled make sure the horse can put his head out over a stable door or window to the outside and fresh air;
- ensure stables are well ventilated (cobwebs mean there is not enough air movement); leave top doors and windows open; clean out and disinfect stables regularly to prevent the build-up of dust;
- if a horse must be stabled FOR ANY PERIOD OF TIME, do not bed on straw or sawdust; suitable beddings are dust-free shavings, shredded paper or other baled dust-free beddings; don't deep litter beds; make sure that horses in the next stable or the same air space are also on dust free beds;
- do not stable horses with heaves next to hay or straw stores or dusty arenas;
- feed dust-free forage - haylage, pelleted feeds or very good quality hay with no visible dust or mould that has been soaked in water for at least 15 minutes before feeding; change the water used for soaking hay daily;
- feed soaked hay from the ground, do not use hay nets or elevated hay racks; this will reduce the level of dust in the air.

## Is RAO inherited?

A recent paper was presented at the British Equine Veterinary Association Congress in Birmingham in September 2012 describing a complicated genetic basis for the inheritance of RAO. One of the genes implicated is the same as the gene associated with asthma and allergic skin disease in humans. Although susceptibility to the disease appears to be inherited, it is not down to one single gene and so it is unlikely that a single test for the disease will be developed. Furthermore, families of RAO affected horses were shown to have an increased susceptibility to developing insect bite hypersensitivity and urticaria or hives, again an allergic reaction. However these same horses seemed to have an increased resistance to worms, in that they shed

far fewer worm eggs in their droppings compared with unrelated horses on the same pasture.



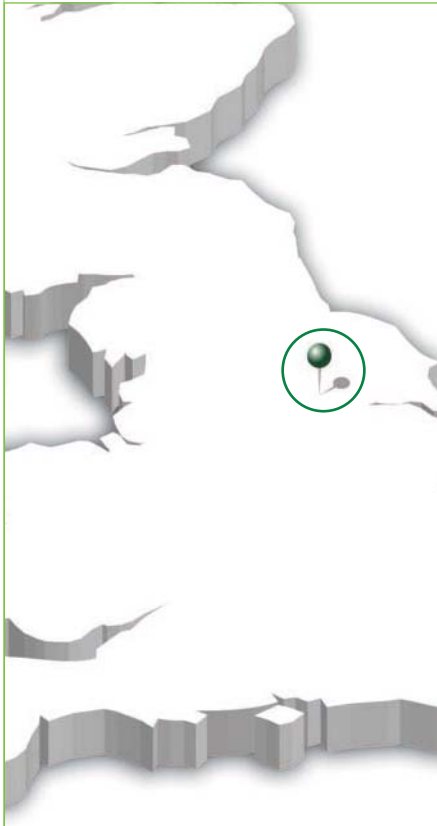
Figure 3 - Improving ventilation is key to the management of stabled RAO sufferers



# Equine herpesvirus: The facts

Ben Gaskell BVSc MRCVS, Minster Equine Practice

EQUINE  
**Minster**  
VETERINARY CLINIC



Veterinary Surgeon **Ben Gaskell**

XLVets Equine Practice **Minster Equine Practice**



## What is Equine herpesvirus?

Equine herpesvirus (EHV) is a contagious viral infection which can cause respiratory disease, abortions and neurological disease in horses. There are two main types of EHV which cause disease:

- EHV-4 is very common and causes respiratory disease;
- EHV-1 is less common, but can have severe effects, causing abortion and neurological disease.

Most horses are first exposed to the disease as youngsters, with the vast majority of our horses exposed to EHV throughout their lives.

The effects of disease on a breeding establishment can be devastating, but even on livery or competition yards, entire seasons can be compromised due to EHV infection affecting performance and well-being.

## What are the symptoms?

In respiratory disease the clinical symptoms may include a rise in body temperature, nasal discharge and a dry cough in younger horses. The horse may also show signs of depression and lethargy. However you can commonly have a disease scenario with no obvious symptoms, just depressed performance or recurrent airway infections in the horses.

In breeding mares, EHV-1 is the most commonly diagnosed cause of infectious abortion. Abortion usually occurs in the last third of pregnancy, but as a previous infection can leave a horse as a carrier, there may be no clinical signs prior to abortion.

Very rarely EHV-1 infection can cause a neurological disease - horses may become paralysed and are given a very poor prognosis.

## How is EHV transmitted?

EHV is a highly contagious viral disease. It passes from horse to horse through the respiratory tract as viral particles are breathed in from infected horses.

Once a horse is infected with EHV, it can harbour the virus throughout its life and potentially 'shed' the disease to other animals. Horses shed EHV at times of stress, for example moving yards or when under other disease challenge.

The main concern for the equine population is the way the disease persists in our horses and, since natural immunity is short-lived,

horses can remain at risk from EHV despite previous exposure. This is why ongoing control and vaccination are so important.

## What can I do to prevent my horse getting EHV?

Control of EHV-1 and EHV-4 is based on prevention and limiting the spread of disease if it occurs.

- Stable management, in particular when dealing with potentially infected horses, is key to the control of the disease. Try to minimise stressful situations for your horses as much as possible and isolate sick or new horses.
- Vaccination can play a big role; vaccinating your horse will help reduce the severity of clinical signs. But perhaps more importantly vaccination can reduce the spread of the EHV by reducing the amount of infective virus that is shed onto other in-contact horses.

Vaccination is more effective when enough horses are covered for a 'herd immunity' strategy to work. The same collective principle is true of management strategies. A yard approach is the best way to manage the threat of this common disease - discuss it with your vet for help and information on the best approach for your horses.



# VET VIEWPOINT...

WE VIEW THE OPINIONS OF OUR VETS ON THE TOPIC OF EQUINE HERPESVIRUS AND THE THREAT TO THE HORSE POPULATION.

**Colin Mitchell BVM&S  
CertEP MRCVS**  
Scott Mitchell Associates



Last year, one of our equine clients experienced a yard outbreak of Equine Herpesvirus (EHV). The infection was thought to come from stabling near a coughing horse at a show. The virus slowly spread through the yard and approximately 25 horses were affected with clinical signs of respiratory disease. Following the collection of blood samples and nasal swabs, a positive EHV diagnosis was made.

The illness was, in terms of severity, quite mild. The horses all kept eating and there were no cases of serious illness or deaths.

However, the effect on the yard activities was much more serious. The majority of the showing season was missed and throughout the winter, days hunting had to be very much reduced. The horses were not ridden for a considerable number of months.

A vaccine against EHV is available and I would recommend a discussion with your vet to decide whether or not the vaccine may be of benefit to your horse.

## How much of a problem is equine herpesvirus in the horse population that you treat?

**Andy Cant BVMS CertVR MRCVS**  
Northvet Veterinary Group



This is not a disease that we are aware is active in Orkney and indeed not one that the labs in the north of Scotland are picking up either. It would be true to say that luckily we do not see much infectious disease in general in the local horse population. It may be our relative geographical isolation that helps with that and the fact that horses tend not to be kept in large liveryes and so spread is less likely. That's not to say that there haven't been bits of coughs 'gan aboot' from time to time but no definitive viral agents have been isolated. This should not make us complacent however; with horses travelling south to competition the possibility of coming home with more than you left with is there. With new horses coming in from south it is wise for owners to isolate horses for 2-3 weeks on arrival to protect our biosecurity.



**Paul May BVMS MRCVS Paragon Veterinary Group**

It is presumed that the virus is widespread in most of the horse populations that we see from the fell herds, individual horses and ponies to livery and competition yards. As the transmission of the virus relies on movement of horses in stressful circumstances, that will be happening in all of these groups.

In our practice, I suspect that the impact of equine herpes virus is felt mostly in younger, competition horses. We try to monitor the activity of the virus by investigating any

early births, sudden and severe neurological cases (thankfully very rare in our experience) and any flu-like outbreaks. But this leaves what is probably the largest group un-investigated, the underperforming competition horses.

We try to encourage vaccination in this group and some years we are more successful than others. In contrast we often have a good uptake of vaccine in the mares that have been to us for artificial insemination.



# pony pages

Welcome...  
TO THE AUTUMN 2012  
XLVETS EQUINE PONY PAGES



Even small wounds can be serious if they are close to a joint

## Top Tips

### First aid in ponies...

from Carol Nelson BVM&S MRCVS, Thrums Veterinary Group

- ✓ If you find your pony very lame then check for any obvious swellings, wounds, or heat in his foot or leg. If the pony is too uncomfortable then don't move him until the vet arrives.
- ✓ Wounds are very common. If your pony has a wound anywhere near a joint or tendon sheath then no matter how small the wound, call the vet immediately as joint infections are very serious and need to be recognised quickly.
- ✓ All wounds should be kept clean - you should avoid using antiseptics as these can actually damage tissue and slow down healing. Vets will often use sterile fluids but warm water is also suitable.
- ✓ Sometimes wounds on the legs are bandaged in order to keep them clean and reduce swelling. When bandaging you must be careful not to pull the bandaging material too tightly as this will be uncomfortable and may actually cause damage. You should always be able to insert your finger between the top of the bandage and the leg - if you can't do this then the bandage is probably too tight.
- ✓ Make sure your pony is up to date with his tetanus vaccinations - this is VERY important as this bug is able to enter your pony's body through the tiniest of wounds and the disease is usually fatal.
- ✓ Ponies often step on things that they shouldn't such as nails. If you find a nail in your pony's foot call the vet. Do not remove the nail before the vet has examined the foot.
- ✓ Any pony with a swollen, red or half shut eye should be checked by a vet as soon as possible. Don't try to force your pony's eyelids open to have a look as this may cause further damage.
- ✓ If your pony is showing signs of colic such as excessive rolling, kicking at his belly etc. then try to keep him moving while waiting for the vet to arrive.



You should always be able to insert your finger between the top of the bandage and the leg



Ponies often step on things that they shouldn't such as nails



CONGRATULATIONS TO...  
COMPETITION 10 WINNER  
**Rosie Metherell** A client of  
Penbode Equine Vets



# 1st Competition page

**ENTER TODAY**  
GOOD LUCK...

**Welcome**  
XLVets Equine Competition



All of the words listed below can be found in the grid with the exception of one. **Which one is it?** Circle all the words as you find them, there will be one word which isn't in the grid. Write this word on the competition entry form and send it back to us for **YOUR CHANCE TO WIN.**

W	V	P	U	R	R	I	T	S	C	E	I	Q	S	U
T	Z	D	B	S	C	L	Y	D	E	S	D	A	L	E
K	V	R	A	D	J	D	R	K	N	Y	U	T	S	F
J	C	I	M	V	D	Z	C	C	X	N	A	I	I	I
A	P	V	W	V	M	I	Q	O	A	D	A	E	U	O
F	I	L	X	P	U	B	S	T	C	S	L	P	H	
B	Q	N	K	F	Z	E	O	W	X	C	O	P	N	K
U	Q	G	O	T	S	O	U	E	H	R	F	P	V	E
C	T	O	Q	R	L	Q	E	O	I	R	U	A	E	O
K	H	B	O	A	W	D	O	F	F	E	C	G	S	R
L	D	H	P	U	P	L	A	U	A	L	A	S	X	A
E	X	P	X	T	Y	F	I	R	S	T	A	I	D	C
B	A	Q	P	O	U	L	T	I	C	E	J	O	V	I
A	E	L	U	V	C	X	M	Z	W	W	Z	I	F	N
S	M	E	B	A	N	D	A	G	E	H	G	B	Y	G

- FIRST AID
- BUCKLE
- STIRRUP
- POULTICE
- HORSEBOX
- APPLE
- CLYDESDALE
- HOOF PICK
- SCHOOL
- FOAL
- RACING
- NOSE
- RUG
- DRIVING
- BANDAGE
- APPALOOSA

**WIN** a V-Bandz Horse & Rider Starter Fluorescent Set (One Size), comprising of a rider hatband and tabard, and for the horse there are legbands, a tail guard and a noseband.

**WIN!**



Which one is missing!!!  
Fill in your answer below

Answer to Summer 2012 competition: 6 differences

A winner will be chosen from all the correct entries received before the closing date, Friday 21st December 2012. The winner will be revealed in the next issue of Equine Matters. The editor's decision is final, no correspondence will be entered into.

THE MISSING WORD IS: .....

Send your completed entry to: Equine Matters Competition No.11  
XLVets, Carlisle House, Townhead Road, Dalston, Carlisle, CA5 7JF

Name \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_

Daytime Telephone Number \_\_\_\_\_

Email \_\_\_\_\_

XLVets Practice Name \_\_\_\_\_

I do not wish to receive further information from XLVets

I would like to receive further information from XLVets by e-mail


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 <b>Alnorthumbria Veterinary Group</b> Morpeth, Northumberland Telephone: 01670 897597	 <b>Clyde Veterinary Group</b> Lanark, Lanarkshire Telephone: 01555 660000	 <b>Millcroft Veterinary Group</b> Cockermouth, Cumbria Telephone: 01900 826666	 <b>Scott Mitchell Associates</b> Hexham, Northumberland Telephone: 01434 608999
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 <b>Bishopton Veterinary Group</b> Ripon, North Yorkshire Telephone: 01765 602396	 <b>Endell Veterinary Group</b> Salisbury, Wiltshire Telephone: 01722 710046	 <b>Paragon Veterinary Group</b> Carlisle, Cumbria Telephone: 01228 710208	 <b>Thrums Veterinary Group</b> Kirriemuir, Angus Telephone: 01575 572643
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