

XLVETS EQUINE - BETTER TOGETHER

Equine

MATTERS

www.xlvets.co.uk

Inside this issue:

BACK PAIN IN HORSES

We focus on the common issue of back pain in horses and the most effective forms of treatment.

EQUINE SURGERY

We provide advice on how to prepare you and your horse for surgery.



Practice Focus

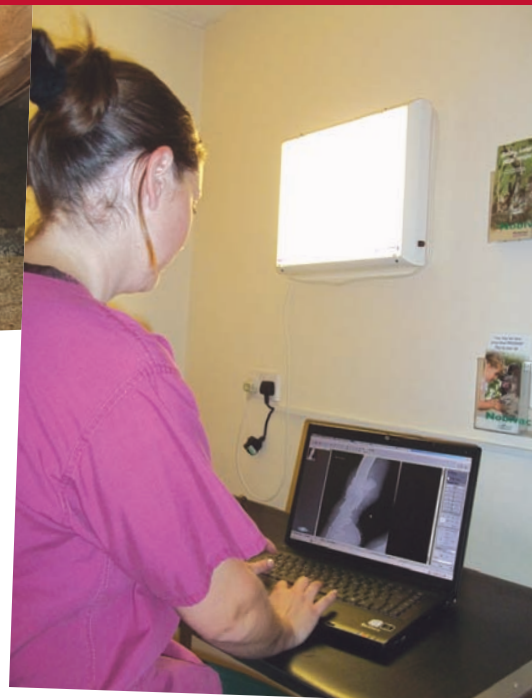
In each issue of **Equine Matters** we feature a brief insight into a selection of the XLVets Equine Practices. Featured in this issue are Alnorthumbria, Calweton and Scott Mitchell...



Hexham, Northumberland

Scott Mitchell Associates is a mixed veterinary practice based in Hexham, Northumberland, providing veterinary services in Northumberland, Tyneside and County Durham. The veterinary practice is divided into equine, farm and small animal departments each staffed with a caring and dedicated team. The modern premises are equipped with full surgical and hospitalisation facilities for equine patients including 24 hour nursing care. Our equine services include digital x-ray, ultrasound, endoscopy, shockwave, stem cell therapy and gastroscopy. The practice also has visiting specialists in equine surgery and medicine. The equine department, led by Colin Mitchell, provides vet cover for Newcastle and Hexham Racecourses, Hexham Horse Trials and three local point-to-points. Scott Mitchell Associates are committed to the further education of our staff and our clients in the form of regular client evenings and workshops. The practice offers a professional caring service to all from the pet donkey to the performance horse.

Visit us on facebook or at www.vets1.com



Callington, Cornwall

Calweton Veterinary Group is a progressive mixed practice with dedicated equine, small animal and farm teams covering East Cornwall and West Devon.

As a first opinion practice we provide all aspects of routine equine medical care including examinations, vaccinations, worming advice (and in-house Worm Egg Counts), identichipping, lameness investigations, AI and pre purchase examinations. We also run a popular dental service with cases ranging from routine dental care to dental radiography and tooth extraction.

We regularly perform 'in field' surgical anaesthesia for minor surgical procedures such as colt castrations and in addition to our own fully portable digital radiography unit we offer a number of other services including ultrasonography, heart monitoring and endoscopy. Our vets also hold regular client meetings and we provide quarterly newsletters.

Find us at www.calwetonvets.co.uk and on facebook.



Morpeth, Northumberland

The Alnorthumbria Veterinary Group equine division has 5 dedicated equine vets and an experienced nursing team providing 24 hour diagnostic, surgical and hospital services out of our new equine clinic at Fairmoor, Morpeth, Northumberland, located close to the A1 with easy access.

We are an RCVS tier 2 equine practice and a nurses training practice. We strive to keep improving our clinical standards by continued education of our vets and nurses. This allows us to provide the highest standard of veterinary care for our patients.

We have regular clinics with specialised surgeons and medicine specialists and liaise closely with all farriers and physiotherapists in the area. We provide veterinary cover at Newcastle and Kelso racecourses, and are also working as part of the veterinary team at London 2012. We have a wealth of experience in competition injuries, and pride ourselves in the care of all horses, ponies and donkeys.

Visit our website to find out more: www.alnorthumbriavets.co.uk



SUMMER 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

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 Belmont Veterinary Centre
 Bishopton Veterinary Group
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THE EDITOR

Welcome to the 'summer 2012' edition of Equine Matters...

...produced by XLVets Equine practices.

In this issue we focus on back pain in horses, including two real life case examples and information on the use of both physiotherapy and acupuncture in its treatment. We meet a specialist travelling equine surgeon and provide advice on how to prepare you and your horse for equine surgery.

At last the lovely long summer evenings are with us allowing everyone to enjoy some quality time with our equine friends. On behalf of XLVets Equine I'd like to wish you all a successful and safe summer season.

Liz Mitchell MA VetMB CertEP MRCVS
 Scott Mitchell Associates



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Julian Rishworth BVetMed MRCVS, Minster Equine Veterinary Clinic

Understanding equine back pain



Veterinary Surgeon Julian Rishworth

XLVets Equine Practice Minster Equine Veterinary Clinic



The horse's back is a large and complex structure with a multitude of physical functions to perform.

It is centred around a long bony column made up of individual vertebrae which house and protect the important nervous tissue of the spinal cord and act as the scaffold onto which the muscles and ligaments attach. The spine can be divided into five main sections, the neck, the thoracic (chest) spine, the lumbar spine, the sacrum and the tail. Here we will concentrate on the neck, the thoraco-lumbar region together and a little in the sacral region.

Pain can originate in any of the structures of the back; therefore we can see bone pain, muscular pain, ligament pain, nerve tissue pain or any combination of all four.

The neck is a very mobile part of the spine, acting to hold up the very heavy head of the

horse and move it to all the positions necessary. This involves a lot of muscular activity therefore muscular pain problems in the neck are common and show up pretty easily. Also because of the degree of movement required, any abnormality in the joints between the vertebrae in the neck, (there are seven in the neck), will also show as pain.

The thoraco-lumbar spine is much less mobile than the neck, its main function is to store and transfer the energy produced by the powerhouse of the hind-quarters to the front limbs as well as providing the solid bridge on which a rider can sit and to support the heavy contents of the horse's abdomen. The sacrum is a group of fused vertebrae which is the bit of the spine the pelvis is joined to by the sacroiliac joint. This is a very strong joint that doesn't move but the energy that it transmits from the hind limbs to the spine means any damage can cause significant pain.

Finding out which part of the back is causing the pain can be very challenging. The process of diagnosis is often far from straightforward. Examination of the back will start with looking for signs of asymmetry in the muscle cover, followed by feeling for signs of pain in any particular area. The degree of mobility (movement) will be assessed directly such as testing how far the neck can move or by checking the back dips normally (see box 1).

Next, watching the horse move at walk and trot in a straight line and on the lunge, together with some specific moves such as tight circles on the spot and backing up, often gives clues as to the presence of back pain - as well as identifying any lameness that may be present. Vets will also pull sideways on the tail while the horse walks forward to assess the strength in the back and the horse's ability to resist being pulled off track.

Apart from a few specific conditions such as over-riding dorsal spinous processes (kissing spines - see box 2) it isn't possible to block out regions of the back, such as can be done in the limbs, therefore, other techniques are required.

Scintigraphy or 'bone scanning' relies on radioactive markers highlighting areas of increased bone activity and is ideal for showing up problems with the bones of the spine, such as fractures, kissing spines or arthritis between the vertebrae. Bone scanning is also good at getting information from areas that are difficult to get images from using other techniques, due to their size, such as the pelvis and thoraco-lumbar spine.

X-rays are quite useful for the neck and the tops of the thoraco-lumbar spine but the large amount of muscle and tissue surrounding the rest of the spine makes getting images difficult.

Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) would give great pictures of the horse's back, however, the size of a horse means they don't fit in the machines which are made for humans. These techniques can be used for the upper neck in some cases.

Ultrasound scanning is much more frequently used in the horse's back and can show changes such as arthritis in the joints between the vertebrae very well. Other soft-tissue injuries can also be detected with ultrasound, like damage or cysts within the ligaments of the spine.

Laboratory tests can be helpful to diagnose some muscle problems, such as 'tying-up'.

A lot of back pain can be attributable to spasm of the nerves and muscles and this can respond really well to appropriate physiotherapy. This sort of problem can occur on its own or it can be secondary to lameness in one or more limbs. Chartered physiotherapists (See Box 3) will only work under veterinary referral and should the physio find problems that are not responding adequately or keep recurring, they will refer back to a veterinary surgeon to investigate the underlying cause.

Poorly fitting tack can cause discomfort and some pain but in my opinion is over-used as a source for equine back problems. It is, of course, important to ensure the tack fits correctly but for all but minor problems in the saddle area, be sure to explore the other possibilities rather than blaming the tack too quickly.

1: Assessing back mobility

A normal horse should dip its back when pinched along the spine behind the saddle area; this is often misinterpreted by owners as a sign of pain. A horse with back pain will fail to dip, instead their backs are tense and rigid to resist movement as it is painful for them to move.

2: Kissing spines

Over-riding Dorsal Spinous Processes (Kissing Spines) These are a common diagnosis but convincing findings on x-rays should be combined with good response to the local infiltration of local anaesthetic to ensure they are the only or significant contributing factor to the back pain. Treatments can involve local injections of anti-inflammatories such as steroids, shock wave therapy and in severe cases surgery may be required.



3: Chartered physiotherapists

Chartered Physiotherapists are fully qualified human physiotherapists. Those with extra training to deal with animals should be members of ACPAT the Association of Chartered Physiotherapists in Animal Therapy. It is important to use only appropriately qualified people who will also have proper insurance in place.

There are a lot of myths surrounding pain in the back, but when approached in a methodical way by qualified professionals the right diagnosis means that the most appropriate treatment plan can be developed to give your horse the best chance of a full recovery.





Equine Physiotherapy for the painful back



Rachel Greetham BSc (Hons) MCSP, SRP, Category A member ACPAT

Back problems are the most common issue that Chartered Animal Physiotherapists are called to see. This is why Chartered physiotherapists are often called the 'back men or women'. Beware there are 'back men and women' who have NO qualifications so always make sure the person treating your horse is fully qualified.

All Chartered Animal Physiotherapists are fully qualified, insured and experienced enabling them to give correct and appropriate treatment to deal with the problems.

To find a chartered physiotherapist in your area go to;
www.acpat.org.uk

The most frequently occurring back problems are muscular and can present in many ways. Often it is a change from the 'normal'. For example, the horse is normally stiff to the right and he has started being stiff to the left. If you have a new horse it can sometimes be difficult to know what is normal. It is good practice to get new horses routinely checked after you make the purchase or start harder work with them. This is to ensure there are no physical problems making it more difficult for them to perform.

Like humans, horses will tolerate levels of pain very differently so it is important to get your horses assessed and treated by a physiotherapist so that they can be pain free enabling them to work/perform to the best of their ability. Even if your horse isn't presenting with any of the symptoms opposite they may still have a back problem. It is good to have routine checks as issues can be picked up quickly and not develop into larger problems, which take more treatment and time to resolve.

Signs and symptoms of back problems

- Loss of performance
- Schooling issues, disunited in canter, hollowing in transitions, lack of bend, inconsistency in the contact, reluctance to engage and use hind limbs
- Behavioural issues, such as bucking, rearing, nappiness
- Jumping issues, such as refusing, unable to take off when deep, rushing
- Resenting being saddled, or mounted, cold backed
- Lameness
- Lack of straightness especially going down hills
- Dislike of being groomed
- Change in temperament



Carrot stretches help improve core stability and flexibility



Causes and treatment for muscular back problems

The most common cause is trauma, i.e. falls, slips or getting cast. Horses can do stupid things especially playing in the field!

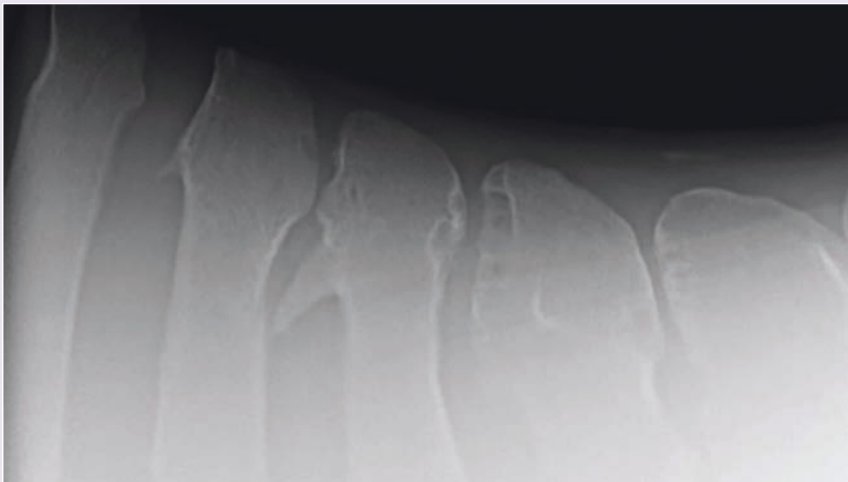
Ill fitting saddles are a major cause of muscular problems. It is important to have saddles regularly checked by a master saddler. In early spring the horses are often changing shape as the work intensity increases so this is a good time to get saddles checked before the season starts. Physiotherapists will liaise and work closely with your saddler.

Muscular back pain can be the secondary problem and be caused by a primary problem in the limbs such as foot imbalance or joint problems such as arthritis or navicular. The horses will compensate for the limb problem and hold themselves differently through their neck and back, causing the muscles in the neck and back to go into spasm. The limb problem may be very mild so no lameness is apparent and the major problem presents as back pain. Although with treatment the back pain may resolve, it is likely to recur as the cause of the problem still persists. Chartered physiotherapists will work closely with

owners, riders and vets to look at the whole picture to help resolve the problem.

It is also important to remember that horses are athletes and like human athletes they will tweak and sprain muscles during the work at home and at competitions. It is important that these mild tweaks and sprains are treated early so they don't develop into more major problems, which then require more treatment and time off.

Another common cause of muscular back problems is overriding dorsal spinous processes, more commonly known as 'kissing spines'. This diagnosis is much more common today as the x-ray equipment has advanced so the back is much easier to x-ray, see the touching spinous processes and therefore diagnose the condition. The touching spinous processes cause an inflammatory response and pain so the surrounding muscles go into spasm to protect the area and limit the amount of movement. In mild cases just physiotherapy alone can manage the problem but generally it is a combined approach of veterinary treatment, physiotherapy and rehabilitation.



(Above) X-ray showing severe 'kissing spines'



Lunging and long lining are very important to build up top-line and core stability thus helping recovery from and preventing recurrence of back pain.



Pole work can be done both ridden and in hand to increase strength and co-ordination.

How do we treat?

One of our most important tools are our hands. There are a wide variety of manual techniques used such as reciprocal inhibition, trigger point release, myofascial release, joint mobilisations, massage and stretches. These will reduce pain, muscle spasm and stiffness and will therefore improve range of movement and flexibility. We also use electrotherapies such as ultrasound, laser, PEME H Wave, TENS and neuromuscular stimulation. These are used to promote the body's natural healing process, reduce pain and complement the manual therapies used.

Chartered Physiotherapists are also very involved in the rehabilitation of horses following injury. Rehabilitation is very important to increase muscle strength, flexibility and to try to prevent recurrence of the injuries. The physiotherapist will also assess for any weakness and movement abnormalities, which may make the horses more prone to back problems in the future. They will prescribe exercise and rehabilitation programmes to strengthen specific areas.

You can help your horse by trying to improve his/her strength and flexibility during ridden or ground work. Your physiotherapist can give you a specific rehab programme using lunging, long reining or pole work. Also the physio will teach you stretches for the neck, back and limbs to keep your horse supple and flexible.

Prevention is better than cure so remember that:

- Good warm ups and cool downs are essential.
- To work the horse appropriate to its level of fitness and ability.
- To have regular physiotherapy, saddlery and dental checks.
- Good core stability and top line strength.

Don't ignore the slight problems or small signs and symptoms. If you suspect or are unsure about any issues get your horse assessed by a chartered physiotherapist or vet before the problem becomes more serious and therefore will take longer to heal.

Case Study: A neck condition treated by medical management - 'A real pain in the neck'

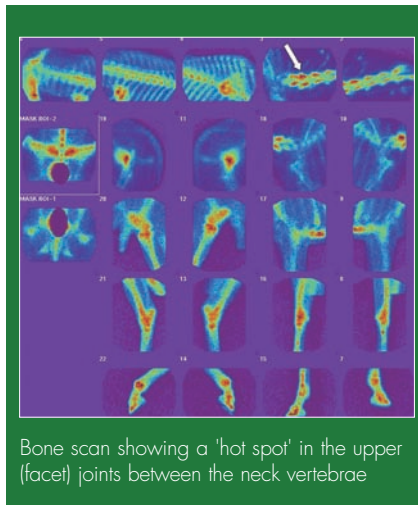


Richard Sutcliffe BVM&S MRCVS, Bishopton Veterinary Group

Hurly Burly, a grey 16 year old Connemara x gelding who was used for pleasure riding and local competitions presented to the practice with a 'stiff neck'. A clinical examination revealed nothing obviously abnormal and after a short course of 'bute' pain killer anti-inflammatory and a period of rest things returned to normal.

Over a year later Hurly Burly's owner noticed that when bringing him in from the field on an evening after a day at grass, Hurly Burly could not flex his neck when negotiating the corner which led to his stable. Each morning the stiffness had improved and his ridden work was unaffected.

When examined on the stable yard Hurly Burly was tied up but held his head and neck over to his left. He was very reluctant to either straighten or flex his neck to the right - when requested to do so he preferred to pivot his body around his forelegs. After another brief period of unsuccessful treatment with 'bute' he was referred for investigation of the neck pain by nuclear scintigraphy or 'a bone scan'.



Bone scan showing a 'hot spot' in the upper (facet) joints between the neck vertebrae

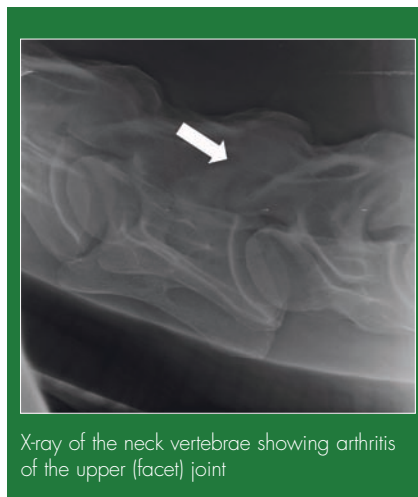
After a two week rest period we decided to supplement this treatment with a drug called Equidronate® (formerly Tildren®) with the aim of improving the long term prognosis. This medication is licensed for the treatment of osteoarthritis of the small hock joints (bone spavin) but it has also been used in the treatment of a range of arthritic joints. It acts by modifying the disease process by inhibiting the cells within bone called osteoclasts. These cells absorb the bone matrix during the arthritic disease process and are thought to contribute to the pain experienced with the disease.

Hurly Burly was additionally given a course of Cartrophen-Vet® intramuscular injections which have good anti-inflammatory properties in arthritic joints and prescribed a daily glucosamine joint supplement in feed.

This investigation took place two years ago now, and since then Hurly Burly has been happily grazing outdoors without signs of neck pain and has continued to enjoy his normal ridden exercise.

The bone scan images produced by the radioactively labelled marker show areas of higher bone metabolism as 'hot spots'. His bone scan showed high levels of radiation in the lower neck vertebrae especially the upper joints between the 5th and 6th and the 6th and 7th cervical vertebrae.

As a result, once Hurly Burly was less radioactive, x-rays were taken of his lower neck vertebrae which confirmed arthritic changes in these areas. The affected articular facet joints were medicated with corticosteroid (anti-inflammatory) injections guided by an ultrasound scan.



X-ray of the neck vertebrae showing arthritis of the upper (facet) joint



Hurly Burly relaxing in his stable at home



Veterinary Surgeon **Richard Sutcliffe**
 XLVets Equine Practice **Bishopton Veterinary Group**

Case Study: A back condition 'kissing spines' requiring surgical treatment

Mark Tabachnik BSc BVM&S Cert EP BAEDT MRCVS, Wright & Morten Veterinary Surgeons



A four year old thoroughbred gelding, 'Obi' had been retired from racing for unknown reasons, and bought as a potential eventer. However, as soon as he moved to his new home, it became clear that things were not all rosy. The owners reported that he had proved to be a kind horse, eager to please, but somehow inelegant and often unable to do what he was asked. He was stiff and unresponsive to the bit and was unwilling to be ridden in a collected outline. He was also reluctant to jump and lacked the natural balance and bounce you would hope to see in such a well-bred thoroughbred.

On examination, I felt he was underweight, with poorly developed muscles across his topline, back and hips. He held his back high and straight - we tend to call this a roached back conformation. I ran my hands over Obi's muscles. They were stiff and hard - they didn't have the soft, responsive feel of an equine athlete's healthy muscle.

There are two tests, called dorsiflexion and ventroflexion, which involve running a blunt object such as a pen lightly across the horse's spine. A normal horse will flex his back away from the pen, arching his belly downwards, before arching upwards as the pen runs over the pelvis. But Obi just couldn't do it. He

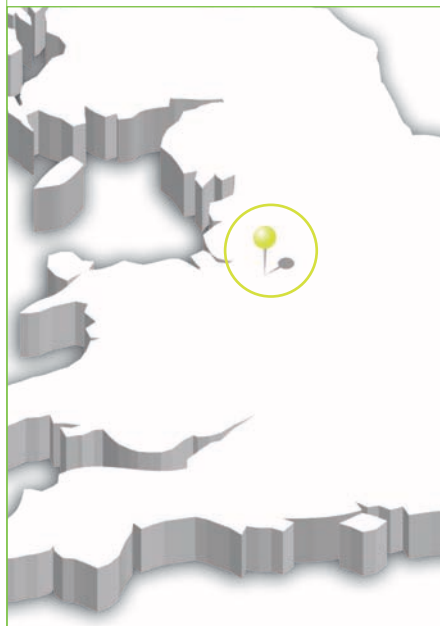
seemed OK when trotted up - his legs moved correctly and no lameness was evident.

During tacking up, Obi tensed up when the girth was tightened, and he was clearly uncomfortable. He seemed happy when ridden in walk, but when asked for trot, things started to change. A normal horse's back moves up and down very naturally during ridden exercise. With Obi, it appeared as if the front and back ends were unconnected, both moving separately with a stiff board between them.

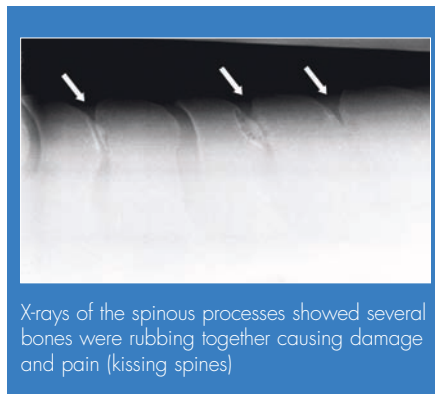
I decided to take some x-rays of Obi's spine, as I was certain his problems stemmed from this area. We use x-rays to look at the spinous processes, which are bony ridges that extend upwards from the bones in the spine (the vertebrae). There should normally be no contact between the individual spines. On x-ray, Obi had several spinous processes rubbing against each other, and there was evidence from the damage to the bone that this had been going on for a long time. This condition is known as 'kissing spines' because the spinous processes are literally touching each other. With bits of bone rubbing on each other, it was no wonder Obi was holding his back stiffly. It would have been constantly painful for him, a situation made worse by both exercise and the weight of a rider.

a type of bone saw called an osteotome to chisel away the bone from the spinous processes that were rubbing together. Horses cope fine without the bone, and although you do permanently change the shape of the horse's back, we felt this was a fair swap for a pain-free future.

Obi recovered well. He had a couple of months off with some protein supplements to help build muscle, and some physiotherapy to ensure his back was finally pain-free.

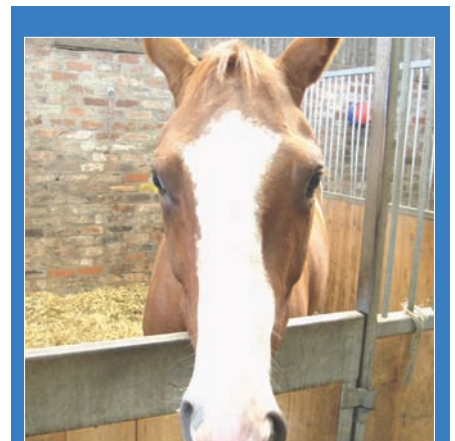


Veterinary Surgeon	Mark Tabachnik
XLVets Equine Practice	Wright & Morten Veterinary Surgeons



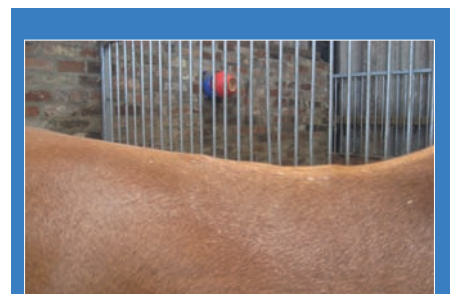
X-rays of the spinous processes showed several bones were rubbing together causing damage and pain (kissing spines)

Mild kissing spine cases can respond to medical management, but Obi's case was so bad we decided to send him straight to surgery. Under a general anaesthetic we used



Obi was very comfortable after surgery and recovered well

Obi now looks like a very different horse; he's gained 40kg in weight and has the start of a strong topline. Obi now seems brighter and happier and is working well and pain-free under saddle.



Obi's back three months after surgery showing good healing and final cosmetic appearance



Cedric Chan, BVSc CertES(Orth) DiplECVS MRCVS
 NW Equine Referrals www.nwequinereferrals.com

A 'week in the life' of an equine surgeon...

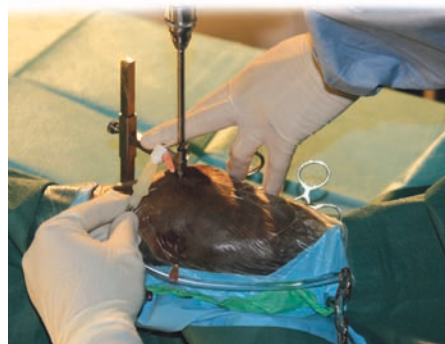
Cedric Chan, BVSc CertES(Orth) DiplECVS MRCVS of NW Equine Referrals is an RCVS & European Recognised Specialist in Equine Surgery based in London.

His role as a travelling consultant equine surgeon takes him to equine practices all over the UK and also abroad to France and more recently to South East Asia and mainland China. He has over twenty years of surgical experience gained from thousands of cases and provides 'State-of-the-Art' surgical equipment. Since the consultancy was set up in 2002 he has worked with several of the XLVets Equine member practices including Alnorthumbria, Cliffe, Fenwold, Minster, Paragon, Scarsdale, Scott Mitchell, Willows and Wright & Morten.

We talk to Cedric and share some of the experiences in 'a week in his life.'

What is involved in working as a travelling consultant Equine Surgeon?

I visit multiple practices on an appointment only basis both regularly or occasionally throughout the year providing mainly elective diagnostic and surgical services. The majority of the work is advanced lameness examinations and surgeries including arthroscopy (key-hole joint surgery), chronic joint infection management, complex wound reconstruction, fracture repair, upper airway surgery, sinus problems and laparoscopy (key-hole abdominal surgery).



Cedric at the Asian Games, 2010

Other than your routine daily veterinary work what other veterinary work are you involved with?

I have been privileged to work as a competition treating vet at the two most recent Olympic Games: Athens 2004 and Beijing 2008. I was the Chief Equine Surgeon at the recent Asian Games in Guangzhou, China 2010, the first FEI world class equestrian competition in dressage, showjumping and eventing on the Chinese mainland. I have been nominated as Chief Equine Surgeon for the next SE Asian Games in Singapore 2014.

I am proactive in the education of vets, nurses, para-professionals and clients, having organised and lectured on many courses and lectured by invitation at many meetings both in the UK and abroad. I act as a post-graduate Royal College of Veterinary Surgeons examiner and an advisor for vets undertaking examinations in Equine Surgery (Chief Examiner 2011) and Equine Practice. I have also published many articles in several veterinary journals and books.

Are you involved in the London 2012 Games? What will your role be?

I am honoured to have been invited to work as a team vet with the Singapore Paralympic Dressage team which is a new challenge for me. They won Bronze at Beijing in 2008, so there is a lot of expectation.

Have you always been interested in horses and do you ride?

When I started vet school at Bristol in 1984 my sole aim was to work with zoo animals and I spent many a summer holiday working at London and Bristol zoos.

My interest in horses and in particular equine surgery was inspired after seeing practice in Newmarket as a 3rd year vet student, and the rest is history as they say!

I do ride but I am best described as a 'fair weather' rider occasionally riding friends' horses for fun or trying to learn polo. The last time I rode was on a Mongolian pony on the Mongolian grasslands last year.



Cedric riding in Mongolia



Performing a stifle arthroscopy in Shanghai, China

What's the most unusual operation you have ever done?

The most unusual operation was performing a stifle arthroscopy (key-hole joint surgery) on a donkey a few years ago not because it was a new operation but because according to every charity involved in treating donkeys on a regular basis this was the first time it had ever been done, a great claim to fame in the equid world!

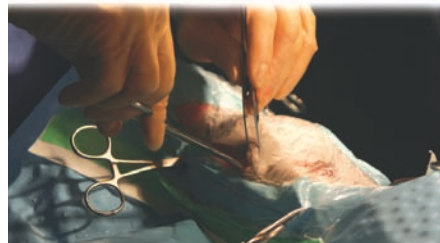
The most ground-breaking operation I did was last year in Shanghai, China where, together with one of my surgical teams from the UK we successfully performed a stifle arthroscopy on China's best showjumper of 2011. This was the first time a horse had been operated on under modern general anaesthetic technique for a key-hole procedure on the Chinese mainland.

Do you listen to music while you operate?

Always!

What are your favourite tracks to play while you operate and why?

I let the nurses decide which tracks or radio station to play.....to avoid subjecting them to my musical tastes. When I do get to play my music I currently like to listen to the Stereophonics, Snow Patrol, Jason Mraz and Jack Johnson. When I did the ground-breaking operation in Shanghai last year we played tracks from the Red Hot Chilli Peppers album Californication - a classic!!!



Of all the countries you work in, do you have a favourite and why?

The UK will always be my favourite because it's still home but when I work in France, Singapore and China I enjoy speaking the local languages and of course eating the local food - there's always something new and delicious to try and they have a genuine love and joy of food in these countries.

Are there down sides to a life on the road?

The only down side is the significant time spent away from family and home. The travelling takes a lot of time - I drive an average 30,000 miles a year and I've attained Gold member status with Virgin Atlantic and Singapore Airlines so you can guess the number of Air Miles I have!

What do you like to do in your leisure time to unwind?

I try to ski as much as possible in the winter and enjoy taking my young border collie dog 'Pip' to obedience and flyball training after he has kept me company in the car working all week.

Living in my hometown of London now, I love going to art galleries, watching the latest movies, listening to live music especially classical and jazz, eating out at new restaurants, and then jogging along the River Thames with 'Pip' to stay in some sort of shape.

Tell us about a week in your life...

Monday

I work from home most Mondays; confirming and organising appointments and surgeries for the week, spending time on new projects such as hospital builds and various paperwork including reports and preparing lectures and articles. I also make lots of telephone calls to vets discussing cases and interpreting e-mailed x-rays. All my surgical equipment needed for the week is loaded into my very practical AudiTT and then I'm ready to do some clinical work.

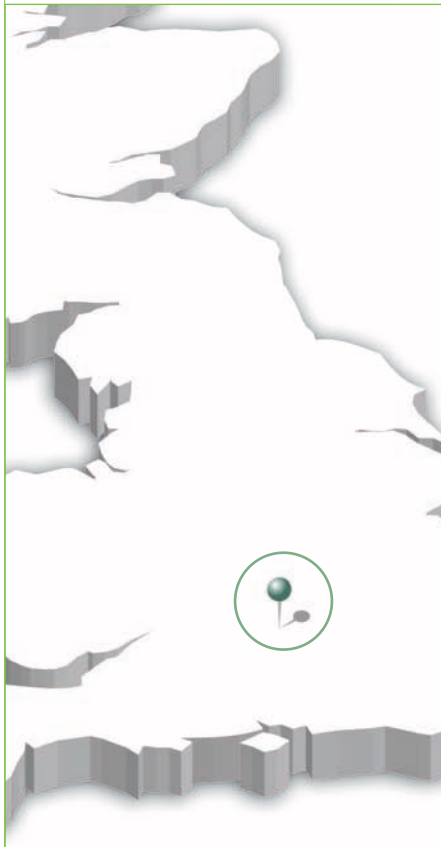
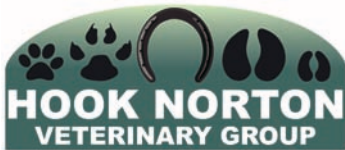
Tuesday/Wednesday/Thursday

I usually try to leave London early Tuesday morning and drive to my first practice to consult and operate straightaway, after a very strong coffee. Depending on the appointments list I may stay in the same part of the country all three days or drive to the next region the evening before. It is not uncommon for me to work at a few different practices in both the North and South of England in a week. In the evenings I usually go out for dinner with vet friends for a catch up.

Friday/Saturday/Sunday

I use Friday as a 'spill over' day to either continue any clinical work or as a 'travel day' to either drive to France with 'Pip' or jump in a taxi from home to London Heathrow airport and fly off to a Far East destination such as Singapore, Hong Kong or Shanghai to work for a few days or more, or sometimes I just have a normal weekend off like everyone else of course!





Veterinary Nurse

Sarah Aston

XLVets Equine Practice

Hook Norton
Veterinary Group

Sarah Aston REVN Hook Norton Veterinary Group

Preparing your horse for surgery...

Don't forget your toothbrush!

So... Your horse has been booked in for an operation and a few nights stay at the surgery, what should you pack? And what should you expect at the practice when you arrive? All XLVets Equine practices with facilities for surgery and hospitalisation have a dedicated team of vets and nurses on-hand to look after your horse during its stay.

You will normally be asked to bring your horse in clean condition the day, or evening before surgery to ensure they get settled in and can be starved appropriately overnight; we can resist those big brown eyes when we need to!

As with human anaesthetics it is important to follow eating and drinking guidelines for similar reasons. They will normally have their hay/haylage for the evening, enough to last them until the early hours, then no further food prior to surgery. A full stomach will put pressure on the diaphragm whilst under anaesthesia which will reduce their lung capacity. A period of starvation also helps reduce the risk of impaction colic after surgery which can occur due to reduced gut movements during the anaesthetic.

Arrival

Once you arrive at the surgery please visit reception before unloading your horse and bringing him/her into the yard. A nurse will come and help you fill in the paperwork and assist with unloading if necessary.

Why do I need to complete paperwork?

Consent forms are a legal document to say the horse has been left in the care of the veterinary practice. It will state the procedure to be performed and that you understand the work that is going to be undertaken and how it may affect your horse. It also states that you understand that you will be billed for the procedure and that you are expected to pay, or contact your insurance company.

We will also ask you to provide an emergency contact number. Please remember to bring your horse's passport which should legally accompany your horse at all times.

Hand-over

You can now put your horse in his/her allocated stable. It is always best to let the horse go and explore their new surroundings and to do the usual... have a wee and a roll, this is normal!

Feel free to bring rugs that your horse will normally wear at home including a thermatex or a sweat sheet if you have one. These are useful for recovery after surgery. We will ask you all the necessary questions about your horse. Please tell us what is normal for him/her at home no matter how odd. It will save us having to call and worry you unnecessarily.

Most hospitals are equipped with hay/haylage and a standard low energy mix/cubes but please check at the time of booking if you need to bring feed. Bear in mind your horse will be off work for a few days at least (obviously surgery dependent) so it is advisable to reduce high energy hard feeds and keep them on a maintenance diet. Please bring any medications or special supplements your horse needs.

This is now the hard part... you need to leave! Your horse will be in our capable hands and we will treat them like we would our own, if there is ever any problem we will contact you.

Pre-operative assessment and treatment

Once your horse has settled in his/her stable the anaesthetist or nurse will do an assessment. This will include; normal heart and breathing rate, temperature (if compliant!) and general demeanour. Blood samples may also be taken for analysis at this time. This is just to ensure that there are no underlying conditions that may affect the anaesthetic.

CHECK LIST: WHAT TO BRING

- Horse passport
- Insurance documents
- Your contact details
- Rugs
- Medications
- Specialist supplements
- Feed and hay/haylage - check with the surgery

SARAH ASTON REVN

After an anaesthetic some horses struggle with temperature regulation so the nurses always ensure appropriate rugs are put on and adjusted as necessary.



Prior to surgery your horse will have a full pre-operative assessment

Your horse will be weighed on a weigh bridge or have their approximate weight calculated, to ensure that all drugs are given at the correct dosages. An intravenous catheter will be placed in a jugular vein. This is to allow the administration of medications and fluids before, during and after surgery.

Shortly before surgery, the anaesthetist will give antibiotics, pain relief and a small dose of sedation (pre-med) before the horse is moved to the induction area. This will prevent any unnecessary pain and make for a much smoother anaesthetic. The horse will be groomed; feet picked out and mouth thoroughly washed so that the mouth is free from food (and bedding!) as a tube will be passed down the windpipe for the anaesthetic.

Induction

About thirty minutes after the pre-med, your horse will be taken down to the padded induction box. Drugs will be given that will slowly and calmly bring your horse under the general anaesthetic and make them lie down. The tube is passed into the windpipe to administer oxygen and anaesthetic gas to keep the horse asleep during surgery. He/she will be positioned on the theatre bed, the area clipped and cleaned. At this stage surgery will begin.



In the padded induction area

Recovery

Once surgery has been completed your horse will be moved to the padded recovery area. The anaesthetist will stay with them until their tube has been removed. They will be constantly monitored and the anaesthetist stays on hand should any problems occur. Once standing, they will still be quite wobbly so they will stay in recovery until they are safe to move.

Back to bed

Once ready, your horse will be slowly walked back to his/her stable. After an anaesthetic some horses struggle with temperature regulation so the nurses always ensure appropriate rugs are put on and adjusted as necessary. You will normally now be contacted by telephone to let you know how the surgery has gone and how your horse is doing. Once they are awake enough to eat, nurses will start to give small handfuls of forage, they are normally very hungry! There is an increased risk of choke if they are fed too much too soon. They are monitored throughout the day for the following; signs of pain, lameness, swelling, any bleeding from dressings/wounds and dropping production. If necessary your horse will be checked through the night by the on-duty nurse.



After surgery horses are made comfortable back in their stable



Medications will be administered via an intravenous catheter in the jugular vein

The day after

The nurses will ensure your horse has had a comfortable night and feed them and muck them out. The surgeon will normally re-examine them and discuss their further care plan. Rugs will be changed as necessary and they are given a nice groom, this not only is good for hygiene reasons, they also really enjoy the interaction and normality.

Coming home

Once the vet is happy for your horse to be discharged they will ring you to discuss further care at home and to arrange an appropriate time for collection. Discharge notes will be printed out for you and any medication/dressings dispensed if required.

Please always feel free to call your surgery and speak to a nurse about what you need to bring with your horse to the clinic. It may also give you some reassurance knowing that you've spoken to someone who will be looking after your horse during his/her stay.



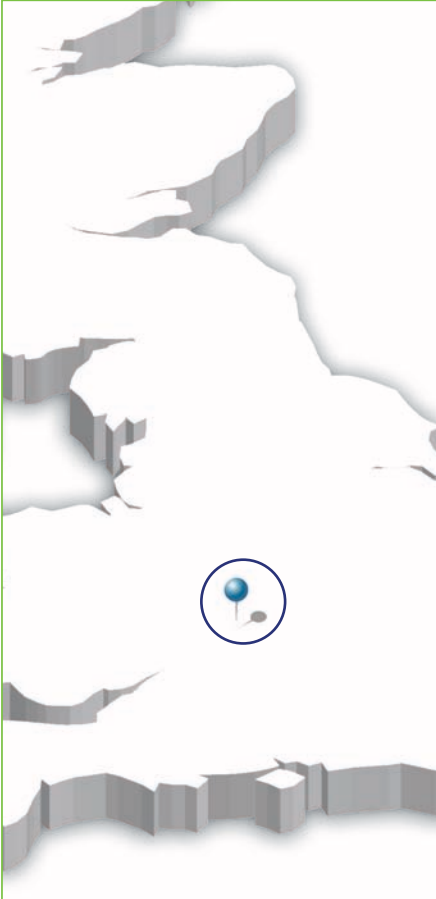
608

Fitting

to maximise performance and minimise injury

Mat Fernandez MRCVS, 608 Farm & Equine Veterinary Surgeons

Performance is the result of the sum of ability or talent, health and fitness. As we will cover in this article, it is the training to fitness of a healthy, sound horse that will guarantee a performance with the minimal risk of injury.



Veterinary Surgeon **Mat Fernandez**
 XLVets Equine Practice **608 Farm & Equine Veterinary Surgeons**



DIET:

The aim is to maintain health and condition and to replenish the energy stores required for the athletic effort. Energy can be obtained from various sources:

Carbohydrates divided into simple sugars like grass and molasses or complex carbohydrates like starch from cereals which are digested in the small intestine for quick release of energy and fibre-based ones like alfalfa or sugar-beet pulp digested in the hind gut for slow and sustained release of energy.

Oil is palatable and after an initial period of getting used to its presence in the diet, is easily absorbed. It contains two and a half times as much energy as carbohydrates on a weight to weight basis. The main source is vegetable oils and the release of energy is slower and more sustained.

Protein can be used as a source of energy but should be used for tissue growth and repair. Its use is expensive and the generation of energy from protein requires a lot of water and an increased work-load by the liver and by the kidneys to get rid of the waste products.



Athletic effort requires the aerobic production of energy (i.e. using oxygen) for muscle function:

From carbohydrates, energy can be produced aerobically which has a low power output, and anaerobically (without oxygen) which has a higher power output but produces lactic acid (which is quite damaging to the cells in, and surrounding the muscles) and, therefore, cannot be maintained for long periods of time.

From oil, energy will be produced aerobically but has a very modest power output and is better if used in combination with carbohydrates to achieve an improved power output. Also, feeding oil during fitting, trains the muscle to use oil during the effort. Energy production for exercise still relies on carbohydrates; but at lower speeds, with a fitter horse and long duration of exercise, oil will contribute more to energy production.

During effort, there is a reduction of the blood supply to the guts which can cause colic as gut motility slows down. The fibre in the diet can contribute to the health of the gut by adding bulk and maintaining the blood supply to it.



Example of diet strategy using the endurance model:

1. In training, increase fibre and fat.
2. Before the competition, use fibres with high water holding ability (like sugar beet) and avoid starch 4 to 5 hours before the competition begins (avoid high blood glucose at the start).
3. During the competition, feed long and short chopped fibre to increase water holding and gut bulk to maintain motility and use sugar and starch 'little and often' to maintain blood sugar levels.
4. Afterwards, feed to improve water and electrolyte status and to replenish muscle and liver glycogen stores.

SOUNDNESS:

Lameness can be defined as the inability to maintain a normal gait either while weight-bearing or during the leg's swinging motion due to pain or mechanical restriction. From the point of view of performance, the emphasis has to be put on prevention of injury rather on the treatment of it.

As seen above, proper feeding will ensure a correct muscle metabolism tailored for each type of exercise. The correct shoeing for each horse is the thing that takes into account the nature of the exercise required as much as the starting balance of the foot and the presence of a conformation abnormality. There is a strong case to be made for a continuous administration of joint supplements in competition horses to help protect the joints from the repeated concussion and to, therefore, delay the onset of arthritis.



FITNESS:

Initially, there is a need for a careful and as comprehensive as possible assessment of the fitness of the horse. Such assessment can be achieved by:

1. monitoring the heart rate as a response to competition
2. monitoring the weight and body condition losses and their recovery
3. determine the levels of muscle enzymes and lactate from blood samples.

Fitness is achieved by training which aims to:

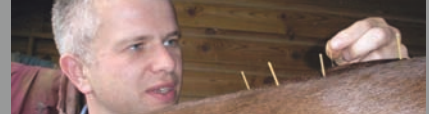
1. increase aerobic capacity (ability to sustain a set level of exercise)
2. increase speed
3. increase strength
4. delay onset of fatigue

The less technical the sport, the higher the importance of training, in achieving the optimal fitness.

In order to reduce the possibility of fatigue and injury by over-training, consider 'tapering' which means gradually reducing the intensity of the training before the competition.

In order to achieve peak fitness and to influence the performance, train by going for the intense, short exercise (which increases the level of muscle fitness while reducing the chances of injury) rather than the long relaxed programme. Exercising during the hottest part of the day will acclimatise the horse to warmer climates. Hill work (up, down and more importantly, sideways) teaches the horse how to balance his feet.

Progress in training is achieved by following a standardised exercise test where we can measure heart rate against different levels of intensity during exercise, all this supported by monitoring muscle enzymes by blood sampling. Finally, a healthy and fit horse will perform better than a more talented but unfit one and will be free from the guilt-laden competition-related injuries.



Equine acupuncture - an ancient art in a modern world



Veterinary Surgeon David Rowlands

XLVets Equine Practice Penbode Equine Vets



David Rowlands BVSc CertEM MRCVS, Penbode Equine Vets

Acupuncture originated over 3,000 years ago but is just as relevant in the treatment of horses' back pain and other musculoskeletal conditions today. Acupuncture can be used in conjunction with conventional equine lameness or back pain treatments. It appears to have particular benefit in relieving the chronic pain associated with arthritis and muscular pain. Acupuncture is extremely useful in the maintenance of geriatric and competition horses. The technique is drug free and hence avoids the issue of detection times with treatments close to competition or racing.

What is acupuncture?

The word acupuncture is derived from the Latin words *acus* meaning needle and *punctura* meaning puncture. It is the piercing of skin with solid needles to relieve pain, cure disease and promote health.



Where did acupuncture originate?

Most people are aware of the Chinese links to acupuncture which date back at least 3,000 years. However, few know that the principle was developed by several independent ancient populations throughout the world. For example it is described in the Papyrus Ebers, which are an ancient Egyptian medical treatise, and also in the Vedas which are the most ancient scriptures of Hinduism which are thought to be 5,000-7,000 years old.

What conditions can be treated with acupuncture?

A wide range of conditions have been documented to have been treated by acupuncture. However, in my experience the technique has particular value in the treatment of chronic pain associated with muscle pain (myofascial pain) or arthritis. I have had consistently good results in the treatment of back and neck pain.

How does acupuncture work?

There are two principal explanations as to how acupuncture works. These are either as part of Traditional Chinese Medicine (TCM) or a scientific approach.

The Chinese approach to disease is holistic. Emotional, hereditary and environmental factors are considered important elements of disease patterns. The philosophy and aim of TCM is to restore equilibrium between physical, emotional and spiritual factors - thus restoring and maintaining health. Treatment involves using needles in specific acupuncture points (often in conjunction with herbal therapy) to address imbalances in Yin and Yang as well as improving the flow of Qi and blood.

Scientific research into acupuncture has made enormous progress over the last 40 years. This has brought about the greater recognition and acceptance of acupuncture within the scientific community. Acupuncture increases the body's release of natural painkillers - endorphin and serotonin - modifying pain pathways in the brain and spinal cord.

Can acupuncture be used at the same time as conventional veterinary medicine?

Yes. The success of any treatment depends on an accurate initial diagnosis. I use acupuncture as a supplementary treatment in many of my lameness and back pain cases. I find it has particularly striking results in relieving secondary back pain associated with hock osteoarthritis (spavin) and muscular pain.

Who can treat horses with acupuncture?

Acupuncture is an act of veterinary surgery, hence only qualified veterinary surgeons can legally treat horses. For a list of veterinary acupuncturists in your area contact the Association of British Veterinary Acupuncturists (ABVA) at www.abva.co.uk.



VET VIEWPOINT...

WE VIEW THE OPINIONS OF OUR VETS ON THE TOPIC OF ACUPUNCTURE AND ITS ROLE IN THE TREATMENT OF PAIN IN HORSES.

**Ben Sturgeon BVM&S
BSc CertEP MRCVS**
Castle Veterinary Surgeons



I'll be honest, I'm not a yin yang guy or a believer in holistic therapies. But I am a scientist who, until proved otherwise, has an open mind and will accept treatment in all its forms as long as it makes the patient better. Accepting that the Chinese have used acupuncture on horses for over 5,000 years does not however, make it right or mean that we shouldn't question it. To say that it can and has been used for basically any medical or orthopaedic condition is a little silly and we need rational clinical comparisons to confirm its absolute relevance.

My explanation for its effectiveness is based on the Western understanding where the insertion of needles stimulates responses within nervous and endocrine systems leading to the release of natural painkillers. As a result I almost exclusively use acupuncture for orthopaedic pain. But to simply treat pain in the knowledge that its cause is still present and likely to recur is, in my opinion, unethical. Hence, it should not be used as a substitute for proper investigation of the problem (i.e. lameness, back pain). When used in combination with exercise management, farriery and joint therapy acupuncture can yield excellent results in many poor performance or lameness related problems.

Does acupuncture have a role in the treatment of pain in horses?

Louise H Cornish BVMS CertEP MRCVS
Clyde Veterinary Group



Our clinic offers Western acupuncture as a complementary therapy. This service is very popular with small animal clients but is also occasionally requested by equine clients, most commonly for chronic pain. Two of our

small animal colleagues run this service, but the equine vet responsible for the horse or pony monitors the progression of the case. Anecdotally, results can be very positive but there are, unfortunately, very few robust studies into its potential benefits, especially in the equine field. This may be because there is little financial gain in acupuncture when compared with drug development, or it may be that it is difficult to design objective trials. I am happy to recommend acupuncture if requested by a client, but I do make sure that they are aware of the limited evidence available to support its use. Therapy is usually prescribed for a month before the case is reevaluated and may continue after this period if the response has been thought to be favourable.

For more information about equine acupuncture, please contact your local XLVets Equine practice.



Jane White BVetMed GPCert(FelP) CVPhys MRCVS
St Boniface Veterinary Clinic

Yes I believe it does. My first hands on experience was with my own Welsh Cob x TB with stifle arthritis. In addition to being lame he had secondary back pain. Pain killer anti-inflammatories provided some relief but having seen some beneficial results in arthritic dogs I decided to give acupuncture a go. Being 'needle shy' meant my colleague opted after the first treatment to clip patches over the relevant points and leave me to it! After 4 weekly sessions he

became more amenable to needling and appeared more comfortable.

A formal training course in veterinary acupuncture followed and I now use it on a regular basis for pain management and as an adjunct to manual and electrotherapies in cats, dogs and horses. My preference is for Seirin J type needles, but for those who are either needle shy or particularly sore I find stimulation of acupuncture points with a laser a useful alternative.



pony pages

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



A normal eye

Top Tips

Keeping eyes healthy...

from Claire Higgins, Drove Veterinary Hospital, Swindon, Wiltshire

- ✓ **1. Know what's normal:**
 - Both eyelids should be fully open with no signs of being puffy or swollen.
 - The front of the eye should be smooth, clear and bright.
 - The inner part of the eyelid (conjunctiva) should be just visible around the eye and salmon pink in colour.
 - There should be no discharge from the eye (a small amount of sleep or tear drops is normal).
- ✓ **2. Keeping the eye clean:**
 - The eyes should be checked at least once daily as part of your horse care routine.
 - A clean, damp soft cloth or sponge can be used to gently clean away small amounts of sleep from the corner of the eye. A separate cloth should be used if one eye is infected, to help prevent spread to the other eye.
- ✓ **3. Prevention of injury:**
 - Before putting your horse into a new area (stable or field), it should be checked thoroughly for anything that potentially could cause an injury e.g. a nail sticking out of fencing.
 - When bathing or washing your horse off, care should be taken that shampoo doesn't go into his eye.
 - When applying fly repellent to the head, it should be put onto a cloth then wiped or sponged on rather than spraying near the eyes.
 - Fly masks are useful to protect the eyes from flies in the summer.
- ✓ **4. Early veterinary treatment if problems arise:**
 - Injuries that involve the eye are a veterinary emergency. Torn eyelids must be repaired accurately to allow them to do their function of protecting the eye properly. Damage to the eyeball requires early treatment to prevent permanent scarring and/or blindness.

Winner

CONGRATULATIONS TO...
COMPETITION 9 WINNER
Anna Slack A client of
Paragon Veterinary Group

Fact!

Did you know -
Horses only lie
down for about
44 minutes
a day...

1st Competition page



ENTER TODAY
GOOD LUCK...

Welcome
XLVets Equine
Competition

How many differences can you spot between the two pictures below. Circle the differences as you find them, then write how many you can find on the competition entry form below and send it back to us for **YOUR CHANCE TO WIN.**

Spot THE Difference



WIN an Equestrian Bag, containing six items including a small body brush, dandy brush, flick brush, face brush, hoof pick and sweat scraper.

WIN!



A winner will be chosen from all the correct entries received before the closing date, Friday 31st August 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.

Answer to Spring 2012 competition: Lameness

THE NUMBER OF DIFFERENCES: _____

Send your completed entry to: Equine Matters Competition No.10
XLVets, Carlisle House, Townhead Road, Dalston, Carlisle, CA5 7JF

Name _____

Daytime Telephone Number _____

Address _____

Email _____

XLVets Practice Name _____

Postcode _____

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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 Alnthumbria Veterinary Group Morpeeth, Northumberland Telephone: 01670 897597	 Clyde Veterinary Group Lanark, Lanarkshire Telephone: 01555 660000	 Northvet Veterinary Group Kirkwall, Orkney Telephone: 01856 873403	 Shepton Veterinary Group Shepton Mallet, Somerset Telephone: 01749 341761
 Ardene House Veterinary Practice Aberdeen, Grampian Telephone: 01224 740700	 Drove Veterinary Hospital Swindon, Wiltshire Telephone: 01793 501499	 Paragon Veterinary Group Carlisle, Cumbria Telephone: 01228 710208	 St Boniface Veterinary Clinic Crediton, Exeter Telephone: 01363 772860
 Belmont Veterinary Centre Hereford, Herefordshire Telephone: 01432 370155	 Endell Veterinary Group Salisbury, Wiltshire Telephone: 01722 710046	 Parklands Veterinary Group Cookstown, Northern Ireland Telephone: 028 867 65765	 Thrums Veterinary Group Kirriemuir, Angus Telephone: 01575 572643
 Bishopton Veterinary Group Ripon, North Yorkshire Telephone: 01765 602396	 Fenwold Veterinary Centre Spilsby, Lincolnshire Telephone: 01790 752227	 PAWS Veterinary Health Centre Nuneaton, Warwickshire Telephone: 02476 384064	 Wensum Valley Veterinary Surgeons Fakenham, Norfolk Telephone: 01328 864444
 Calweton Veterinary Group Callington, Cornwall Telephone: 01579 383231	 Glenthorne Veterinary Group Uttoxeter, Staffordshire Telephone: 01889 562164	 Penbode Equine Vets Halsworthy & Okehampton, Devon Telephone: 01409 253418	 Westmorland Veterinary Group Kendal, Cumbria Telephone: 01539 722692
 Castle Veterinary Surgeons Barnard Castle, Durham Telephone: 01833 695695	 Hook Norton Veterinary Group Banbury, Oxfordshire Telephone: 01608 730085	 Rosevean Veterinary Practice Penzance, Cornwall Telephone: 01736 362215	 Willows Veterinary Group Northwich, Cheshire Telephone: 01565 723030
 Capontree Veterinary Centre Brampton, Cumbria Telephone: 016977 2318	 Larkmead Veterinary Group Wallingford, Oxfordshire Telephone: 01491 651479	 Rutland Veterinary Centre Uppingham, Rutland Telephone: 01572 822399	 Wright & Morten Macclesfield, Cheshire Telephone: 08458 330034
 Chapelfield Veterinary Partnership Norwich, Norfolk Telephone: 01508 530686	 Millcroft Veterinary Group Cockermouth, Cumbria Telephone: 01900 826666	 Scarsdale Veterinary Group Derby, Derbyshire Telephone: 01332 294929	

**XLVETS EQUINE -
BETTER TOGETHER**