



VET magazine

EQUINE VETNOTES

FEBRUARY 19



HAPPY NEW YEAR!!

Thank you all for allowing us to look after your horses over the past year.

We've had a great year supporting you all. Our spirits are high and we're looking forward to supporting you and your horses in every way we can in 2019.

We also have some interesting seminars planned for you this year, starting off with a seminar on wounds at Tielcey Park (see page 4 for details). We wish you all the best for 2019!

VACCINATIONS: Are they necessary?

Ellie Grieves

Horses are the most susceptible animal to this disease, 300 times more susceptible than your dog!

We have lots of information in this newsletter about wounds and one of the potential side effects of wounds is tetanus. Just like humans, horses can develop tetanus. They become infected from soil contamination, where spores of the organism *Clostridium tetani* enter the body through broken skin. Wounds, abscesses, umbilical cords of foals and mares after foaling are the most common occurrences where we may see tetanus. However, even mud-fever can be a cause.

Among all the animal species horses are considered the most susceptible to tetanus, with them being 10 times more susceptible than humans and 300 times more susceptible than dogs. You would have thought with horses living outside and how prone they are to getting wounds and abscesses they would have developed a better natural immunity to this disease, but evolution is sometimes surprising.

The incubation time is three days to one month after a horse is initially infected. This is good to keep in mind for those times you find a small old scratch on your horse; it is worth getting protection from this disease

if they are unvaccinated or vaccination history is unknown. If you have an unvaccinated horse and they get a wound or abscess, we have an antitoxin which acts immediately and lasts for four weeks. This will give you enough time to start the vaccination course, so your horse is covered now and in the future.

Clinical signs of tetanus include:

- Head spasm and neck spasms
- Salivation
- Difficulty swallowing
- Restricted jaw movement (lock jaw)
- Generalised stiffness (classic 'saw horse' stance)
- Difficulty moving or lowering head/neck
- Ears erect and immobile
- Third eyelid protrusion

The treatment for horses with tetanus is intense as they often can't eat or drink. It is also quite expensive and has a poor prognosis with the documented survival rate ranging from 20-30%. Prevention is much easier, successful and cost effective.

We have a video on our Facebook page ([fb.com/TotallyVetsEQ](https://www.facebook.com/TotallyVetsEQ)) that shows a horse that has been infected with tetanus and is showing some of the classical clinical signs listed above.

QUIZZZZZZ...

Check out our website for the answers:

www.totallyvets.co.nz

- Horses can develop tetanus when they lose their baby teeth (known as deciduous teeth):
 - True
 - False
- Which statement is most correct?
 - Horses' teeth erupt and wear throughout their lives
 - Horses' teeth all erupt before the age of 10 and don't change
 - Horses' teeth don't influence riding
- How do you determine if your horse needs to lose weight?
 - Use a weight tape
 - Look at your horse
 - Do a Body Condition Score
- The Body Condition Score focuses on:
 - Visually looking at two angles of the horse to determine the score
 - Visually looking at two angles of the horse to determine the score and palpating six areas of the horses' body
 - Palpating six areas of the horses' body
- Horses don't ever need to lie down to sleep:
 - True
 - False

WOUND WISE

Anna van Bergen

Wounds are inevitable when keeping horses. Luckily they're not all as bad. A lot of wounds can be treated by you, the horse owner.

As vets we still regularly get called out to wounds that have "gone bad" and should have been seen earlier. Often there's a combination of good intentions, a restricted budget and not enough know-how to properly evaluate the wound to make an informed decision. This is understandable, but can result in having to spend more money and keeping your horse out of training for longer. So, to help you guys decide when to call the vet and when to attempt to DIY, we're having a seminar on wounds for anyone who's interested (see page 4 for details).

HERE'S A PREVIEW...

The body has certain tools to aid healing. **Inflammation** is an important one. Mind you, inflammation is not the same as infection. Where infection is a bad thing involving bacteria or other pathogens, inflammation is actually a good thing that is necessary for wound healing, as long as it doesn't spin out of control.



When wound healing begins, the body starts the process of inflammation. The body has to determine which tissue cells are dead or alive, kill any bacteria, and get rid of these things together with any debris that's been left in the wound (sand, dust particles, etc.). The body produces wound fluid to achieve these things. When the wound has been cleaned out by this process, the inflammation should go down.

The next step is **tissue repair**. This can either be the mending of wound edges in a stitched wound, or when a wound is not stitched the body will first try to fill up the defect with granulation tissue and then grow new skin to cover the gap. When a wound is not stitched, this tissue repair process obviously takes much longer. Also, wounds usually become bigger first, because of tension on the wound edges pulling them apart - especially on legs!

When the wound has just closed up, the new tissue is still fragile. Therefore, the last phase in wound healing is **strengthening** of the new

tissue. In damaged tendons (which is like an internal wound), this is actually quite an important phase. A tendon can look healed on an ultrasound, but because the new tendon fibers are still fragile and not aligned properly, there's an increased risk of damaging it again when you do too much too soon. It's therefore important to keep to a good schedule while the tendon adjusts and strengthens. This means that we have to estimate what level of activity the horse can do, and check after a certain amount of time whether the fibers have adjusted themselves properly. If so, we go up a level, then check again and so on, until a horse is fully back into work. Factors like work-load/intensity, duration and training surface are all taken into account. The process of strengthening also happens when other tissue (for instance skin or muscle) heals, but we don't usually notice it as much.



6. Which statement is most correct?
 - a. Tetanus and strangles vaccinations need to be done every two years
 - b. Strangles vaccinations are yearly, tetanus can be done every few years
 - c. Tetanus vaccinations are yearly, strangles can be done every few years
7. Which animal will usually live longer?
 - a. Pony
 - b. Draft horse
 - c. Donkey
8. A fecal egg count exam helps determine?
 - a. If you need to worm your horse
 - b. What product you need to use
 - c. How long the horse has been infected with worms
 - d. If your horse is resistant to a wormer
9. One thing that can cause major problems with colic is:
 - a. Horses can't burp
 - b. Horses can't vomit
 - c. Both



In reality these three phases of wound healing overlap a little in time, so several processes can sometimes be going on at the same time. A wound can also linger in the inflammatory phase or relapse into it if the wound is irritated too much. For example when a wound becomes too dry, or when a wound can't settle because there's too much movement in that body-part, or when the wound isn't bandaged. When a wound isn't bandaged it gets daily insults from its environment causing new micro-trauma, and new debris (sand, dust particles, etc.) and bacteria will also cause a continuous stimulus for the body to create inflammation to clean the wound out. Ongoing irritation and inflammation causes tissue repair of lesser quality and less tensile capacities, proud flesh, delayed wound healing and an end result that's just less pretty.

When we treat a wound we first assess which phase the wound is in at that time. Then by using either medicine or special veterinary wound dressings we can influence the process of inflammation and tissue repair. That way we can achieve more effective and faster wound healing with better cosmetic results (scar tissue).

Would you like to learn more about wounds? We would love to welcome you to our seminar at Teilcey Park!

FACIAL ECZEMA: Interesting new study data

Ellie Grieves

Have you noticed your horse has a runny nose or cough?

Many people often get worried this time of year that their horses may get affected by facial eczema like other animals (cows, sheep, goats and alpacas). If you have any of these other animals, you may already know about this disease. It's caused by the fungus *Pithomyces chartarum*, which causes liver disease and a characteristic photosensitising skin reaction, where skin becomes sunburnt and skin peels off in poorly haired or white-haired areas.

Luckily for us, horses are not known to get this disease. However, what we do often see during facial eczema season (Jan-May) is horses with nasal discharge and developing a dry cough. A recent journal article by *Schöniger 2016* linked the facial eczema fungus to rhinitis (inflammation of the nasal passages) in a horse. Even though more research is needed, this does fit with what our vets often observe in horses during the early autumn months. In addition, horse owners often start feeding hay in this period, which can also irritate the airways.

Usually these mild respiratory symptoms are self-limiting and clear on their own, but occasionally they don't and can develop into pneumonia or a condition called heaves (allergic airway disease).

Some things that can help your horse recover from mild respiratory signs can be:

- Wetting hay or feed just before it is fed to reduce dust and irritants
- Reduce the amount of pasture your horse has and supplement with feeds that are less irritating
- Avoid your horse standing in dusty yards or stables by dampening the surface or standing them on concrete/grass while saddling up etc.

When do you need to get worried? If your horse goes off its feed, has labored breathing, if the nasal discharge is no longer clear (it might turn yellow or green in appearance), elevated temperature (>38.3°C), increased respiratory rate (over 16 breaths/minute) or is regularly coughing, where they don't seem to be able to clear their throat. All of these could be cause for concern and likely a vet visit is required.

CASE OF THE MONTH

Anna van Bergen

As vets we never know what a day may bring. A large amount of our appointments aren't pre-booked as they are first aid and emergency calls, making every day exciting and unpredictable!

A few months ago we were called to see a thoroughbred mare who had a small wound above her eye. The owner was very concerned as he had heard gun shots the day before and this wound looked very suspicious and could easily have been a bullet wound. On close inspection the puncture wound extended down to the bone of the eye-socket. We decided the best way to determine the amount of bony damage would be to take radiographs. These showed a piece of bone had chipped off and was displaced inside the wound. Because the skull has many little rims, cavities and shapes that are all projected, overlapping each other on radiographs, a small piece of bone can be difficult to detect. A fracture line can also take time to become visible on radiographs. All in all, we were very happy we were able to see the fragment clearly.

A loose piece of bone acts as a "foreign object", which the horses' immune system attempts to push out. This piece of bone was too large and needed to be surgically removed. We took radiographs after surgery which showed we had successfully removed everything. The mare received antibiotics for a few days and was doing well, however the wound continued to discharge. We had a sneaky suspicion that there may be another piece of bone still in the wound that had been missed on radiographs. The owner opted to wait and see if it would come out on its own accord. As the wound was bordering the eye, and we couldn't be sure there was another piece of bone, there was some concern that it would not be able to come out on its own. We discussed the risks, things to pay attention to, supplied the owner with materials to clean the wound daily and touched base regularly. A few weeks later we received a call saying that the piece of bone

was sticking out of the wound. We were able to successfully remove it, after which the discharge stopped completely. We were very happy the horse recovered well. Even though she was very unlucky to get wounded in the first place, she was very lucky she was able to push out that last piece of bone herself without any complications.

As vets we're not only there for the horse, we're there for the owner too. Any problem usually has several treatment options, and owners need to weigh up their benefits, costs and potential risks. Sometimes the outcome even surprises us! When something has an obvious risk, but a good outcome, we really do cherish that.

Do you have an interesting story to share?

We like to read about them on our Facebook page!



OUR SERVICES

- Vaccinations
- Castration
- Pre-purchase exams
- Dental exams
- Nutrition
- Reproduction exams and AI
- Lameness exams
- Wounds & emergency care
- General health exams
- Radiography
- Endoscopy
- Electrocardiography

For our dedicated equine afterhours emergency service (shared with Equivets) call **027 487 8479**.

UPCOMING EVENTS

Wounds Seminar

28th February

6pm at Tielcey Park Stables and Events Centre

474 Fitzherbert East Road, Aokautere