Warby St Vet Hospital Newsletter

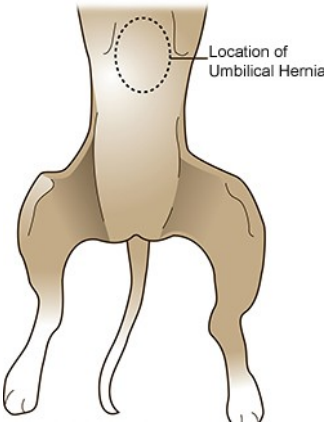
and Wangaratta Equine Hospital

SPRING 2014

The days are getting longer and the weather warmer. Spring is in the air.

Umbilical Hernias

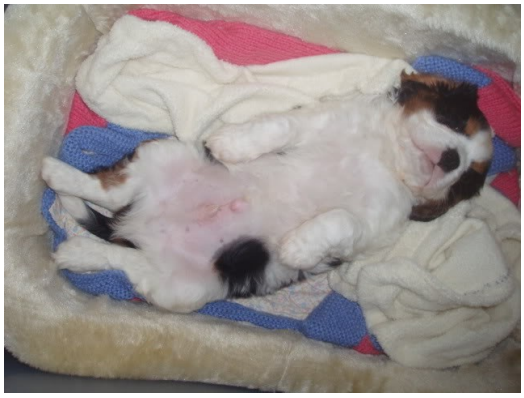
Umbilical hernias form in our pets due to a failure of the muscles to close over in the area of the umbilicus after birth. The umbilical area is akin to the human belly-button and is the area where blood vessels enter and exit the unborn animal's body to connect it to the placenta (umbilical cord). These vessels bring oxygen and nutrients to the growing fetus, but become redundant after birth as the animal begins to breath and feed on its own.



During birth the umbilical cord is severed and the end clots up and then it begins to shrink down. The muscle ring surrounding the vessels entering the body should likewise shrink down and form a seal in the wall of the abdomen. However, in some cases this process fails and a circular gap is left in the abdominal muscle wall. Usually the skin seals over this gap and the hernia is apparent as a soft bulging lump on the lower midline of the abdomen just behind the rib cage.

An umbilical hernia in a puppy

Umbilical hernias can range in size from very small to very large. The herniated abdominal contents are usually fatty tissues from the abdomen, but in a worst case scenario loops of the intestine can fall into the hernia. If these loops of intestine then twist and gas accumulates and the blood supply is stopped a life threatening situation of intestinal obstruction and tissue death can develop. As a result all umbilical hernias should be assessed and the haste with which they should be attended to needs to be determined.



Another pup showing an umbilical hernia just in front of the prepuce and behind the sternum.

Repair of an umbilical hernia is a surgical process that involves stitching the muscles of the hernial ring back together to create the seal that should have formed originally. It is often done at the time of desexing when the animal is under a general anaesthetic anyway and is a minor procedure that brings a lot of peace of mind. The pet will need to rest for a week or so after the surgery as the tissues mesh together and heal before the skin stitches are removed 10-14 days after surgery.

If your pet has a suspicious bump on their belly it is a good idea to have it assessed by your veterinarian and a plan made for its correction.

Spring is in the Air!

September is here and with it the beginning of spring and hopefully some warmer weather. Spring is a great time in the North East, but also brings some challenges for pet owners. The increase in temperatures brings the snakes out from their hiding places and we need to be on our guard again with strategies to minimise the risk of snake bites. Walking dogs on their leads instead of free to roam is one good strategy, as are solar powered snake repellers available from local retailers or online.

Spring also brings an increase in biting parasites including fleas and mosquitoes. Although we recommend year round flea prevention now is a good time to begin again if you have lapsed. Making sure your dog is up to date with heartworm prevention (spread by mosquito bites) is also an important thing to be aware of. If your dog hasn't been on heartworm prevention then a blood test for heartworm at your local vet is a wise move before starting preventatives.

Mosquitoes also spread calici virus in rabbits and there is a vaccination available to protect them from this disease. It is a good idea to cover rabbit hutches with fly wire in the mosquito season and to have them back in the hutch before dusk as myxomatosis is spread by mosquitoes too and there is not a vaccination for this disease available in Australia.

Other biting insects are out and about too, especially bees. Bee stings are particularly common in dogs and tend to occur on the head causing swelling of the lips, muzzle and area above the eyes. Ingesting or inhaling bees can cause swelling in the throat which is obviously much more serious. Keeping dogs clear of flowering bushes is the way to go. As always prevention is better than cure.

Enjoy the warmer weather and take care out there with your pets.

NEWSLETTER MAILING LIST

We produce a 4 page newsletter every season to keep our clients informed about the goings on at Warby St Veterinary Hospital and the Wangaratta Equine Hospital. We send the newsletter out with our statements each time it is printed, but also deliver it electronically by email. If you would like to receive the newsletter in your email inbox you can either email me your address at tim@warbyvet.com.au or fill out the slip below and return it to Warby St Vet Hospital or Wangaratta Equine Hospital in person or by snail mail.

YES! I'D LIKE TO RECEIVE THE QUARTERLY WARBY ST VET HOSPITAL NEWSLETTER BY EMAIL!

NAME: .....

EMAIL ADDRESS: .....

"KING VALLEY RUN"

A service for routine work provided most **TUESDAYS** charging travel fees from:

Glenrowan, Greta, Moyhu or Milawa.

"BEECHWORTH AND MYRTLEFORD RUN"

For routine work most **THURSDAYS**, travel fees from:

Markwood, Everton, Beechworth, Myrtleford

Botulism

The disease botulism is caused by the toxin produced by *Clostridium botulinum* bacteria. These bacteria can survive as spores in the environment for up to 30 years. The toxin itself can survive for approximately a year once formed. Most incidences of botulism are associated with the ingestion of pre formed toxin, generally from contamination of feed by carrion. When the carcass of a dead animal is invaded by *Clostridium botulinum*, very high concentration of toxin can accumulate in the tissue, so that only very small amounts of carcass can be lethal for the animal that ingests it. There are several different toxin types. The toxin is extremely potent, commonly described as one of the most potent toxins known to man. Surprisingly the toxin is also use in cosmetic procedures for humans (Botox) where very small amounts injected around the face cause paralysis of the muscles and removal of frown lines.

Botulism occurs worldwide, but in Australia is often associated with hay/silage production in areas that have had a mouse plague.

An animal that ingests the botulinum toxin develops clinical signs 2-17 days later. Typical cases develop progressive paralysis of the limbs, and often muscles around the jaw and throat. They are often drooling excessively and struggling to breath. Sometimes they extend their hind legs out behind them (frog legged) to make breathing easier, and sometimes their tongue hangs out of their mouth and won't return when pulled on. They can look similar to a cow down with calving paralysis or milk fever, but botulism doesn't occur necessarily in association with lactation/calving and there will generally be multiple animals affected whereas milk fever is usually one animal. Milk fever also responds rapidly to calcium administration (4 in 1) whereas botulism does not.

Diagnosis of botulism is quite difficult, other than recognition of the clinical signs. The toxin can be identified in contaminated foodstuffs, but very small amounts are enough to cause disease so detection can be difficult. There are no classic post mortem signs. In cases where the botulism has occurred from the animals chewing on bones you may find bones in the rumen/stomach as evidence of the animals ingesting the toxin from this source.

Mild cases, where the animal can still stand, will sometimes recover. Cattle or horses that are recumbent have a poor prognosis. Treatment involves nursing care, and administration of an antitoxin where available. (unfortunately not readily available in Australia). As the disease is caused by a preformed toxin and not by the bacteria themselves being within the animal antibiotics are or no use. It can occur in outbreak form, where there is the potential for entire herds to be lost. In one case, a cat carcass contaminating feed was responsible for the death of 427 out of 444 dairy cattle. It often occurs when cattle are hungry in times of drought, and likely to chew on carrion.

The main way to prevent botulism is to vaccinate your herd. Other than this, prevention of access to animal carcasses/bones is important as is protection of stored feeds from carcasses rotting inside the stored feed.

Left: A cow affected by botulinum toxin. Note the similar appearance to milk fever.

Below: A person affected by botulinum toxin (Botox), before and after.

'Roarers'

Laryngeal hemiplegia – the 'Roarer'

Paralysis of the larynx will cause an inspiratory noise during exercise, and an exercise intolerance. These horses are known as 'roarers', and can make a roaring or whistling noise when breathing in.

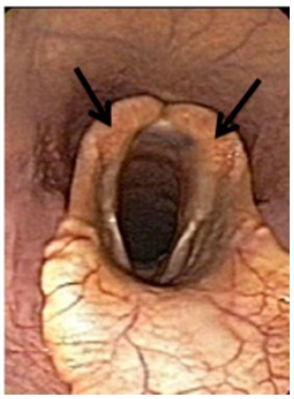
In horses, the left recurrent laryngeal nerve is one of the longest in the body. It is prone to damage and degeneration of the nerve axons, particularly in large long necked young horses. Thoroughbred and warmbloods are most commonly affected. When this nerve is not functioning properly, it cannot open the left side of the larynx as far as it should when the horse is breathing in. This can be in varying grades, from mild dysfunction to complete paralysis of the left arytenoid cartilage. The cartilage collapses in the airway when the horse is breathing in, creating a noise during exercise. At high speeds, this can have a profound impact on exercise tolerance and performance.

Diagnosis involves a physical examination, and endoscopy of the upper respiratory tract. The paralysed side of the larynx can be directly visualised.

Treatment can involve surgery and/or laser treatment.

A 'tieback' procedure involves fitting a laryngeal prosthesis which pulls the left arytenoid cartilage back so that side of the larynx remains open. Another treatment option is a nerve muscle pedicle graft, which re-innervates the larynx. Treatment options selected will depend on grade of hemiplegia, and intended use of the horse.

Horses unsuitable for racing may be able to compete and have a new career in lower intensity sports.

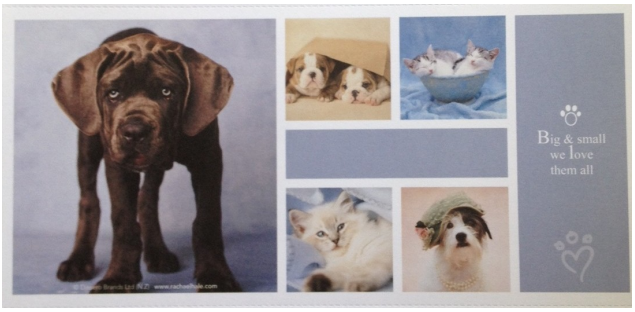


Normal larynx

Laryngeal hemiplegia—note the asymmetry of the larynx with the horse's L side falling inwards (on our right in the picture)

VACCINATION REMINDERS

We know that a lot of our clients rely on us sending them reminders when their animals are due for ongoing preventative health measures, like vaccinations or cartrophen injections for arthritis. We have always relied on posted reminders in envelopes in the past, which we feel are beneficial because of their tangible nature. A letter pinned to the fridge or notice board keeps on being visible and keeps on reminding us to get our pets into the vet. We are continuing on with posted reminders, but you may notice that they have changed to a more colourful smaller postcard type compared to the old letter in an envelope. These reminders still contain the same information as before and help the environment a little by reducing paper use. We are also trying to move with the times and technology and looking at sending reminders by email or SMS. All transmitted reminders rely on us having accurate contact information so if you think your address or mobile phone number may be out of date on your client record please let us know so we can continue to remind you effectively when your animals are due for a visit, test or treatment.



One of our new postcard style reminder notices. Coming to a mailbox near you soon!