Newsletter Autumn 2016



# updates from the field

## News



## **Partner Practice**

Kieran MacKenzie, a final year veterinary science student from the University of Sydney Faculty of Veterinary Science, has just completed a month's mixed practice rotation at CVH. Our staff enjoy having students in the practice and appreciate their great passion for animals, academic excellence and often, their unexpectedly interesting backgrounds – Kieran began her degree in Veterinary Science with a Marine Science degree already under her belt.

Not surprisingly, scuba diving is one of Kieran's interests (she's worked at Shark Dive Xtreme at Manly) and before she began studying vet science, Kieran worked as Senior Aquarist at Underwater World Mooloolaba Queensland and Oceanworld at Manly. While studying, she also worked as a vet nurse at a large Sydney veterinary hospital for the past 4 years.

CVH hosts final year (Year 5) and Year 3 veterinary science students because we're an accredited Partner Practice of the Faculty of Veterinary Science. And because we're in high demand as a busy rural mixed practice, students must now compete with their peers to win time at CVH. As well as a number of high school work experience students, in 2016 we are hosting 9 university students – that's back-to-back from January to October! The students stay in our purpose-built student accommodation facilities in the vet hospital for up to 4 weeks and our role is to give them as much practical experience as possible.

The generosity and understanding of our clients is critical to the success of the student program and we really appreciate their support. In many ways we see our clients as our partners in the student experience.

## Cost effective herd health

Summer and autumn are the seasons for pregnancy diagnosis in cattle. While your cows are in the yards, it's also the perfect opportunity to save time and money and combine pregnancy testing with testing for bovine pestivirus and liver fluke.

#### **Pestivirus**

Pestivirus is one of the most common viruses found in Australian beef cattle herds – in fact it's estimated around 70% of cattle herds across the country are actively infected with the virus, and this district is no different. With those statistics, it's not surprising the virus is one of the most invasive of cattle pathogens. It has been found in virtually every body tissue – that means infection is spread quickly through close contact between animals.

Pestivirus causes a range of serious disease syndromes in cows and calves, including reproductive failure, abnormal calves, illthrift, diarrhoea and respiratory disease. Major losses occur when a previously uninfected herd becomes infected during the mating period and in early pregnancy.

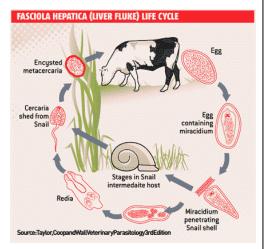
A vaccine is available for use in some situations, but it is relatively expensive and it may be possible to manage existing pestivirus infection with a combination of testing and/or vaccination. In disease-free herds for example, a vaccination program may be advisable.

Blood testing a sample of the herd at the time of pregnancy diagnosis is an excellent, cost effective way to establish an accurate picture of the level of immunity in your herd and/or to detect the presence of carrier animals. This knowledge helps our vets develop a strategy for control of the disease within specific herds. Pestivirus is a complicated disease, but it can be managed to minimise losses.

## **Liver fluke**

And the good news? The same blood samples can be used to test for liver fluke.

The ELISA blood test for liver fluke is more accurate than other tests, including faecal sedimentation tests. Knowing the liver fluke status of your herd in autumn is important as the most strategic and effective time to drench against fluke in cattle is after the start of frosts. Killing fluke at this time means reinfection won't be an issue until spring.



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## **Calling all horse owners!**





On the left, Penny shows some of the typical symptoms of PPID (pot belly and long curly coat) and on the right, a sleek, healthy Penny after her 6 month treatment plan. *Images: www.talkaboutlaminitis.com.au.* Refer also to the laminitis fact sheet under Animal Care on the CVH website.

## This is a great opportunity to test your horse for free and help laminitis research.

During autumn 2016 Boehringer Ingelheim Animal Health is offering a free blood test for horses and ponies through approved veterinarians – CVH vets are participating in the program. Called the Resting ACTH test, the blood test helps diagnose PPID or Equine Cushing's Disease, a common hormonal disease that has now been linked to laminitis.

Ring us on (02) 4832 1977 to bring your horse or pony in for a check up and free PPID blood test. Not only could your horse benefit, the results are contributing to a study aimed at assessing the level of PPID in the equine population.

## So what's PPID?

Equine Cushing's Disease, now known as PPID or Pituitary Pars Intermedia Dysfunction, is one of the most common problems affecting the endocrine (hormonal) system of horses and ponies. Cushing's Disease also occurs in humans and other animals – quite commonly in dogs – but symptoms and treatment are usually different.

Interest in equine PPID has increased significantly since scientists linked the disease to the occurrence of laminitis (see www.talkaboutlaminitis.com.au). It's important to note that laminitis has a number of initiating causes, not just PPID, including obesity, ingestion of too much grain and infection from retained membranes in mares post foaling.

Two glands at the base of the brain – the hypothalamus and pituitary – are responsible for the production of hormones. Nerve degeneration in the hypothalamus in older horses and ponies can cause decreased supplies of dopamine, a

neurotransmitter. This in turn impacts negatively on the pituitary gland and causes excessive production of hormones such as ACTH and cortisol, leading to PPID.

## **Clinical Signs**

Symptoms of Equine Cushing's disease vary significantly. In addition to laminitis, clinical signs can include an abnormal hair coat (from excess shedding to a long, wavy overgrown coat), an increase in appetite, sweating, urination and drinking, pot belly, lethargy, weakness and fat in unusual places such as above the eyes.

While many horses have minimal symptoms and live reasonably successfully with the disease for years, diagnosis followed by monitoring and treatment if required can make a significant improvement to their well-being and general health.

## **Diagnosis**

Any of the clinical signs above can point to possible PPID and the diagnosis is confirmed by blood tests. The most commonly used test for PPID is the Resting ACTH test – ACTH levels are abnormally high in horses with Cushing's.

#### **Treatment**

Medication acts directly on the dopamine-producing neurons in the hypothalamus. It helps to combat the effect of dopamine on the pituitary gland, bringing ACTH hormone levels back to more normal levels. It can take up to 12 weeks to see the full benefit of treatment.

Acknowledgement: information in this article is drawn from the Boehringer Ingelheim Animal Health website Talk About Laminitis (www.talkaboutlaminitis.com.au).

## **CONTACT US**

Opening hours 8.30am – 5.30pm Monday to Friday I 9am – 12pm Saturday 24 hour emergency service on (02) 4832 1977

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