Newsletter Summer 2015 2016



# updates from the field

## News



### **Brittany Halls**

CVH is justifiably proud of all its staff, and we're delighted to congratulate vet nurse Brittany Halls for completing a Certificate IV in Veterinary Nursing. All our veterinary nursing staff hold this qualification, awarded by the Veterinary Nurses Council Australia. Brittany started at CVH in April 2013 and has embraced her role, quickly becoming an integral part of the practice. We are thrilled she has been awarded her Certificate and look forward to the next steps in her veterinary nursing career.

### Mobile clinics

CVH now operates mobile clinics each month at:

Taralga - 4th Thursday Gunning - 3rd Tuesday Bigga - 1st Thursday

To ensure our vets are prepared, please ring us on (02) 4832 1977 to book in all mobile clinic small animal appointments and large animal calls.

### Join our Facebook page!

Click on the link at: www.crookwellvet.com.au

# **Diabetes in dogs and cats**

Like many diseases common to people and animals, diabetes mellitus is a frequently diagnosed condition in pets, especially middle aged to older cats and dogs. It's more common in male cats and female dogs.

Diabetes mellitus results from failure of the beta cells in the pancreas to produce enough insulin. The pancreas is a small organ attached to the upper small intestine. It has two functions – producing enzymes to aid in digestion and producing insulin to help the body utilise sugars, fats and proteins.

Pets develop the same types of diabetes as we do: Type 1 (genetic and rare in dogs and cats) and Type 2 (acquired, commonly diagnosed). Conditions predisposing to Type 2 include: obesity, inflammation of the pancreas, long term use of certain drugs (cortisone-type drugs and hormones used for controlling oestrus), diseases such as Cushing's Disease in dogs, and some breeds of dogs and cats are thought to be more susceptible to Type 2).

### **Symptoms**

When the body lacks insulin, sugar accumulates in the blood stream and excess spills into the urine. These high levels of sugar in the urine cause two key clinical signs: polyuria (excess urination) and polydipsia (excess drinking). The pet will eat well, but lose weight. Other signs include cataracts in dogs, fat accumulation in the liver, infections in various organs and, in cats, the development of impaired jumping ability and an abnormal stance and gait.

Dogs and cats with Type 2 diabetes become seriously ill, and are often presented to CVH vomiting, weak and depressed.

### **Diagnosis**

Clinical signs of excess drinking and urination, along with high levels of sugar in the urine and blood, confirm a diagnosis of diabetes mellitus. A blood screen of other organs is essential to check for abnormalities in the liver, kidney and pancreas, as is a test for hyperthyroidism in cats over 7 years – diabetes and hyperthyroidism cause similar clinical signs and can occur concurrently.

### **Treatment**

Treatment aims to replace enough of the body's insulin so clinical signs are controlled while avoiding low blood sugar (hypoglycaemia) from insulin overdose. At CVH we recognise undertaking treatment is a huge, long term commitment for the pet owner - pets with diabetes require individualised, carefully monitored treatment regimes. This includes 12-hourly insulin injections (under the skin via a very fine needle) and an appropriate diet with individualised feeding schedule – CVH stocks canned and dry diets for the diabetic pet. We help with safe weight loss diets for overweight diabetic pets.

Once a diabetic pet is stabilised, ongoing treatment requires excellent teamwork and regular communication between the client and our vets. Clients learn to observe closely their pet's behaviour and health, how to monitor urine for sugar with dipsticks, and to report any concerns promptly.

At CVH, we are well-experienced in the diagnosis and treatment of diabetes, but it is not an easy disease to manage and a successful outcome requires much dedication and patience from the pet's owner. But it's remarkable how many diabetic cats and dogs quickly become accustomed to their insulin injections, and go on to live happily for years after their diagnosis of diabetes.

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# **Alpaca husbandry**

Since the late 1990s, the Crookwell district has seen a steady influx of alpacas and llamas – they are now a valued and important part of CVH's day-to-day practice. Our vets love working with alpacas – they are gentle and amenable to handling (only the occasional individual spits!), and they're incredibly tough and resilient in the face of pain and illness.

Alpacas are one of four members of the South American camelid species: alpacas, llamas, vicunas and guanacos (other camelids include the Bactrian and Dromedary camels from Asia and Africa). The history of their introduction into Australia reads like a Boy's Own adventure (see Animal Care/Alpacas on our website for the full story).

The alpaca industry in Australia is primarily focused on their luxurious, soft fleece. Individual wethers are increasingly used as sheep guardians, and a small meat industry is being developed – alpaca meat is high in protein and low in fat.

### Impact on the environment

Alpacas are the most environmentally friendly domesticated livestock species in Australia. Instead of hooves, they have soft-padded feet, each with two relatively soft toenails that exert a ground foot pressure of 39kPA. Compare this to sheep (82kPA), cattle (185kPA) and the kangaroo (46kPA).

### **Digestive tract and nutrition**

Ruminants (sheep, cattle, goats) have four stomachs, alpacas have three. Adapted to a high fibre diet, alpacas are primarily grazers. They are highly adaptable in dry periods and it's estimated their grazing efficiency is up to 30% higher than sheep and goats. Studies show food matter takes much longer to pass through the alpaca's three stomachs, giving gut microbes longer to work on the ingested carbohydrates. They recycle urea well, thriving on lower protein levels. Alpaca DSE is similar to, or better than, sheep, despite being significantly heavier (females average 70kg, males 85kg).

Alpacas are resistant to bloat and, as well as the difference in stomachs to ruminants, the upper lips of alpacas are split, allowing each side of the lip to move independently and the alpaca to be selective about its choice of food.

### **Preventative management**

**Vaccination**: alpacas require the same protection against clostridial diseases using 5in1 vaccination as sheep and cattle. Use a cattle dose rate and vaccination schedule.

Internal and external parasites: alpacas are susceptible to cattle, goat and sheep intestinal parasites, in particular Barber's Pole, Small Brown Stomach and Black Scour worms, and liver fluke (alpacas prefer grazing in moist, low areas). Alpacas urinate and defaecate in specific areas, helping to minimise exposure to worm eggs but, if grazing with other livestock, they will still ingest worm eggs from elsewhere in the paddock.



There are currently no drenches registered for use in alpacas. Please speak with our vets – the use of sheep drenches in alpacas is permissible, but only under the direction of a veterinarian. It's essential alpaca owners discuss with a vet dose rates and administration. As in sheep, CVH recommends the routine use of faecal egg counts to monitor worm burdens and drench efficacy – drench resistance is already present in alpaca flocks.

Alpacas have their own lice species – ask our vets for advice if you suspect an infestation. Fly strike generally doesn't occur and mulesing is not required – alpacas don't grow fibre in the perianal area and their fleece is not greasy.

Vitamin D deficiency: seen more commonly in alpacas than in other livestock, deficiency can cause rickets in young growing animals. Vitamin D supplementation (by injection), especially during the winter months, is a routine part of alpaca management in the Crookwell district. Excess vitamin D can cause serious, even fatal, toxicity – speak first with CVH vets about supplementation in your flock.

### Reproduction

Unlike the oestrus cycles of cattle and sheep, alpacas are non-seasonal breeders and demonstrate year-round sexual activity. Ovulation is not spontaneous, and occurs as a result of mating. Alpaca pregnancies last on average 342 days.

### **Shearing**

Alpacas need to be shorn annually. To avoid cross-contamination of fibres, AWEX (Australian Wool Exchange) recommends separating alpacas from sheep before yarding and (well before) shearing, and shearing alpacas after all sheep are shorn. The Australian Alpaca Association website has a list of shearers specialising in alpacas.

**Acknowledgements:** information for this article has been drawn from a number of sources, including fact sheets on the Australian Alpaca Association website – see https://www.alpaca.asn.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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