

# Paws claws and judder things

December 2020



## What's inside?

1. We have new owners  
What a team!  
Case of the month
2. Festive season opening hours  
A Christmas special
3. A Christmas special
4. Sporadic bovine encephalomyelitis  
For a bit of a laugh  
A couple of things ...
5. Snippets  
Case of the month discussion  
Contact details

## We have new owners!

We are pleased to share that the sale of the Healthscope New Zealand pathology business, known as Asia Pacific Healthcare Group (APHG), to NZ Super Fund and Ontario Teachers' Pension Plan has completed and our business has been under new ownership since 1 December.

There will be no changes to the way in which we work together or to the dedicated team that you work with on an ongoing basis at Gribbles Veterinary. Our commitment to our clients remains at the core of everything we do.

Given the change in ownership, it is the opportune time to strengthen our New Zealand-centric identity. Importantly, we are retaining all of our individual business unit

names and colour schemes given the strong brand identity of each in their respective markets. The logo for Gribbles Veterinary has changed and of course at APHG level (previously known as Healthscope New Zealand), there has been a complete name and logo change.

With our new logo, we have emphasised our proud New Zealand roots. The logo represents a petri dish with a map of New Zealand under a microscope. The image of New Zealand represents our nationwide presence and that we are dedicated to the whole community in which we serve.

More branding changes will occur over the next few months with the remainder being completed on or before May 2021. Please feel free to ask any questions at this stage or as they arise.

*James Richardson*

**General Manager**

T: 021 820 094

E: [James.Richardson@gribbles.co.nz](mailto:James.Richardson@gribbles.co.nz)



## Welcome

Welcome to the last edition of our newsletter for this year.

We know 2020 has been tough, but we're glad to have been able to support you during this time and receive your support in return. Let's hope next year isn't quite so awkward and brings us all new, but far less stressful challenges.

Please just call us on 0800 GRIBBLES if you need our help with anything.

Kind regards,  
[Karen Cooper](#)  
Marketing Administrator



## Festive season opening hours

This year we have long weekends for both Christmas and New Year, so our laboratories will be closed for the whole long weekend for both holidays.

### Christmas weekend:

We will be closed from Friday 25 December through until Monday 28 December, and will reopen with normal

working hours on Tuesday 29 December.

### New Year weekend:

We will be closed from Friday 1 January through until Monday 4 January, and will reopen with normal working hours on Tuesday 5 January.

**PLEASE NOTE:** We do not recommend sending any samples to the laboratory by overnight courier on the Thursdays prior to these long weekends. Samples will not be delivered until Tuesday and they will likely be unsuitable for testing on receipt.

## What a team!

We already have an absolutely fabulous team of clinical pathologists yet it continues to get better week by week! We'd like you to meet the newest member of our family, Arefeh (Feh) Ravanbakhsh.

Arefeh completed her BSc. and her DVM degrees at the University of Calgary and Saskatchewan Western College of Veterinary Medicine, Canada respectively. She then entered mixed animal practice but decided to pursue her interest in clinical pathology by completing a combined Master's degree and residency at the Western College of Veterinary Medicine.

Arefeh enjoys all aspects of clinical pathology, however, she has a particularly keen interest in the area of haematology and endocrinology. Outside of work she enjoys long distance running, hiking, playing soccer and volleyball, and spending quality time with family and friends.



## Case of the month

### GEOFF ORBELL

We are starting to see cases of attaching and effacing *Escherichia coli* (AEEC) in weaned calves this season. This is likely underdiagnosed in New Zealand as no ante-mortem tests are available, and post-mortem examinations often yield false-negative diagnoses due to intestinal autolysis, or lack of submission of a full range of gastrointestinal samples for histology.

### Clinical history:

Forty weaned dairy calves out of 100 animals across three different mobs (one autumn-born and two spring-born) presented with ill thrift, weight loss, and scouring. Three calves had died over the

last week so the local veterinarian decided to perform a sacrificial post mortem on a moribund calf.

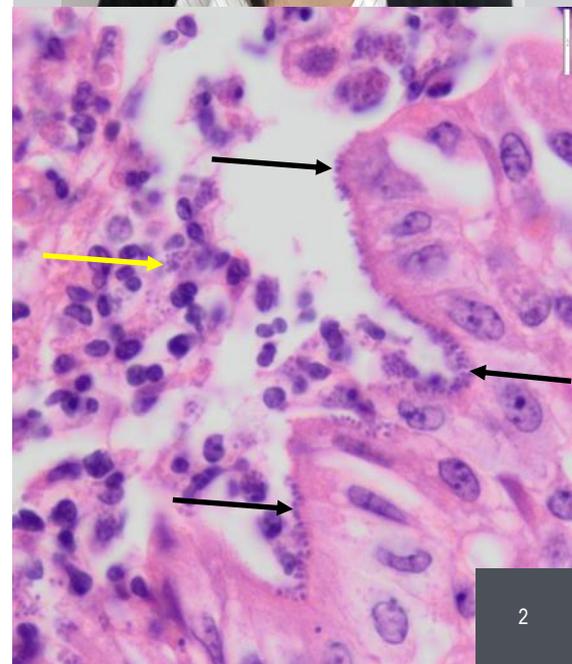
A full range of fresh and fixed tissues including spiral colon were submitted to the laboratory.

### Histopathology findings:

Histology on fixed tissues revealed changes in the gastrointestinal tract consistent with parasitism. In the large intestine there was also erosion and attenuation of the mucosa, with low numbers of degenerate neutrophils. In the adjacent intact mucosa, numerous short bacilli were identified palisading along the brush border consistent with AEEC (enteropathogenic *E. coli*).

CONTINUED ON PAGE 4.

*Photograph right: Spiral colon, calf, H&E stain. Black arrows - numerous short bacilli along the brush border of the mucosa. Yellow arrow - similar bacteria can also be seen in the intestinal lumen in association with degenerate neutrophils.*



# A Christmas special

**KAREN BAILEY**

*'Twas the day before Christmas  
And all round the house,  
The dog chased the cat  
Who chased her toy mouse.  
Their owner watched on  
With a fond, kindly eye,  
Arranging Christmas lilies,  
Nibbling Christmas mince pies.  
Hanging chocolates on the tree,  
Then chopping onions for the BBQ at 3.  
The first guest (from Gribbles) arrived,  
gave a cry,  
Be careful with those, lest your fur-kids  
might die!*

After the year that 2020 has been, most of us will be hoping for some “down-time” and a few treats over the Christmas period, but some holiday traditions can be hazardous to pets, so here are some seasonal reminders:

## Christmas lilies (*Lilium regale*):

There are many different types of lily, but only members of the genera *Lilium* (true lilies) and *Heremacallis* (day lilies) have been definitively associated with renal failure in cats. Dogs do not appear to be at similar risk. Some cats appear to have a “fatal attraction” to lilies. The toxic principle is thought to be a mixture of steroidal glycoalkaloids. All parts of the plant are toxic,

including the pollen.

## Christmas mince pies:

All of the Christmas fruity treats—pies, pudding and cake all contain raisins. Consumption of raisins or grapes is associated with acute renal failure in dogs and possibly in cats. The toxic principle is unclear but appears to be in the flesh, not the seed. The toxic dose seems highly variable. Some dogs may consume substantial amounts without developing clinical signs, but it is safest to assume that any amount may be potentially toxic.

For both these toxicities, clinical signs develop in two to several hours and may include vomiting, lethargy, anorexia, abdominal pain, hypersalivation, ataxia, tremors, occasional seizures and polydipsia which may progress to adipisa. Oliguric to anuric renal failure may develop in 24- 72 hours and death in 3-5 days.

Urinalysis and biochemistry may show isosthenuria, proteinuria, glucosuria, granular casts, increased urea, creatinine, amylase, lipase, potassium, phosphate, calcium and ALT. Prognosis is favourable with early intervention such as induction of vomiting (if safe), gastric lavage, activated charcoal and IV fluids (if not anuric). Peritoneal dialysis has been successful in some cases but once anuria develops prognosis is poor.

## Chocolate:

Chocolate contains variable concentrations of theobromine, a methylated xanthine alkaloid, which can cause CNS stimulation,

increased rate and force of myocardial contraction, increased gastric secretion, smooth muscle relaxation and diuresis. Clinical signs occur within 6-12 hours and may include vomiting, diarrhoea, polyuria, restlessness, tachycardia, tachypnoea, hyperthermia, cardiac arrhythmia, seizure, coma and death. Clinical pathology is non-specific but may include haemoconcentration, low USG, low blood glucose, hypokalaemia.

Treatment involves induced emesis (if early) or gastric lavage, controlling seizures and arrhythmias, gut protectants and supportive care.

## Onions:

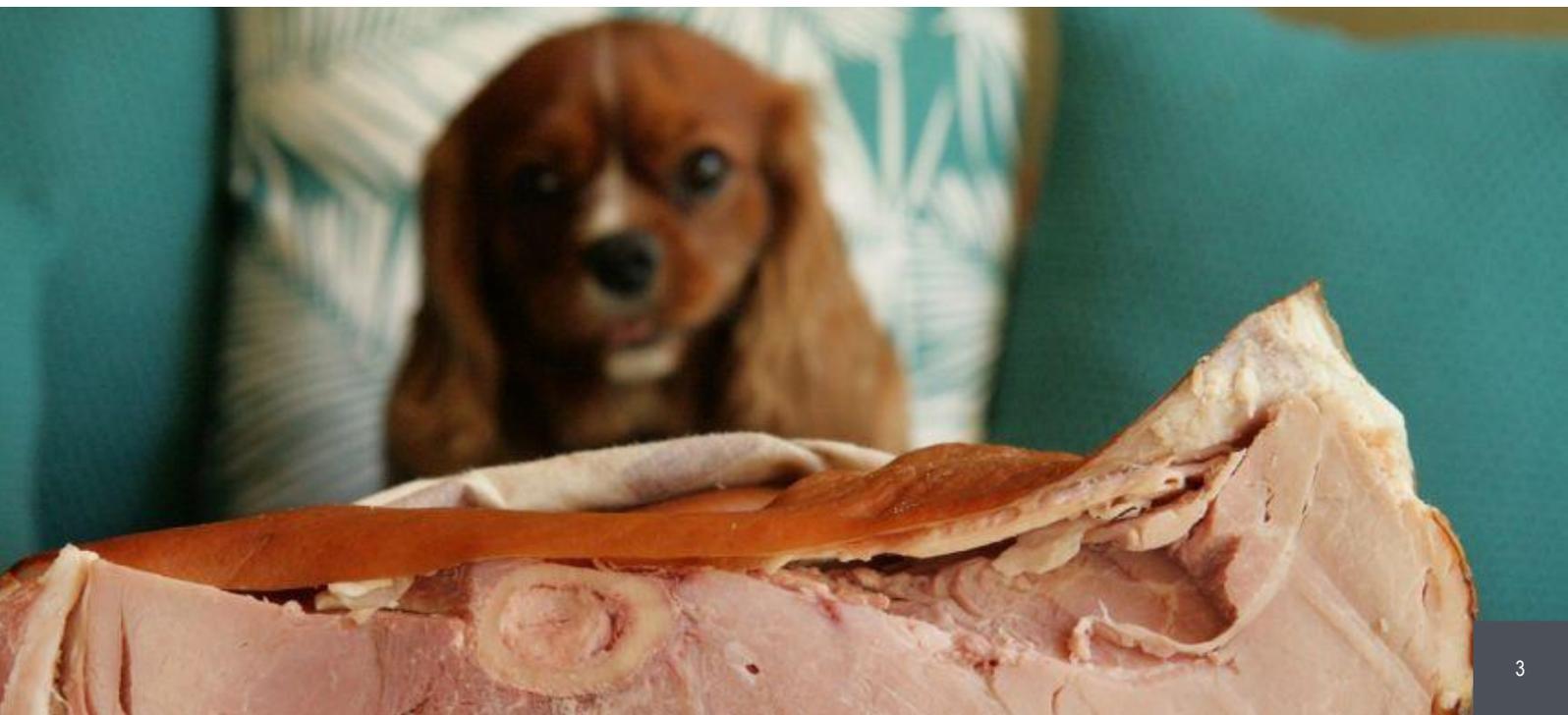
All members of the *Allium* species (including onions and garlic) or sausages or meat patties containing these, have sulphur containing oxidants that can increase Heinz bodies and methemoglobin in red blood cells, with subsequent (often >72 hours later) haemolysis, anaemia and haemoglobinuric nephrosis. Urine is sometimes red/brown.

There is no specific antidote but early and appropriate supportive care is an important factor in prognosis.

## Ham:

Finally, don't forget the Christmas ham – one of my colleagues recalls treating a case of salt toxicity when a dog scooped one of those down!

Let's hope all of our animals can avoid these holiday hazards and that we all have a safe and relaxing festive season.



# Sporadic bovine encephalomyelitis

ROB FAIRLEY

It has been about eight years since the first case of sporadic bovine encephalomyelitis (SBE) was diagnosed in New Zealand. The causative organism, *Chlamydophila pecorum*, was however isolated much earlier (2000) in a healthy goat on a Waikato farm as part of an investigation\*.

Since the first diagnosis of SBE in cattle, many outbreaks of the disease in calves have been seen in several parts of New Zealand and particularly in Canterbury. Some cases present as solitary or a few animals with severe neurological disease, but the most common presentation has been a few calves with severe clinical disease (that is

indistinguishable clinically from other calf neurological problems), and large numbers of calves with mild clinical signs. These calves are listless, weak, may have mild hind limb ataxia and may knuckle on their hind fetlocks. Some calves have trouble getting up but once up, can walk around. Most affected calves will be febrile, and some that seem clinically normal may also have a temperature.

The numbers of calves affected in these outbreaks has been as many as 80 or more (the problem can be very significant). Fortunately, most of the mildly-affected calves respond rapidly to tetracycline treatment. The calves with severe clinical signs do not respond.

Laboratory diagnosis is mainly based on histological examination of the brain of severely affected calves. This can be supported by PCR for *Chlamydophila pecorum* on fresh brain (not all cases are

positive) and we have occasionally detected the organism by PCR in EDTA blood. At post mortem there may be no lesions but some may have evidence of pleuritis or peritonitis (often as clumps of exudate).

Several practitioners who have seen the presentation of large numbers of calves with mild ataxia have indicated they would immediately suspect the disease if it presented in the same way on another farm. If you encounter a case with many calves like this but without a severely affected calf to do histological examination of the brain, it would seem appropriate to presume that it might be SBE and treat with tetracycline. Taking EDTA blood samples from some of these calves pre-treatment for *Chlamydophila* PCR might be worthwhile to try and confirm the diagnosis (we have done too few to know how reliable this might be, but it is worth trying).

\*Surveillance 29(3) 2002

## For a bit of a laugh!

We hope you enjoy this new addition to our newsletter. If you never want to miss out on our latest updates and other gems, visit us on [Facebook](#) and hit the like or follow buttons!

**When you're child, you want to be a teenager. When you're a teenager you want to be an adult. When you're an adult you want to be a cat**



## A couple of things ...

CATHY HARVEY

We pride ourselves on attention to detail, getting the job done right and providing you with the best information in our reports as possible. In order to do this, we do however need help from you guys as we can't be in your clinics to see every case. So here are a couple of requests from our team of pathologists.

### Digital images and photographs

Please send us digital images of radiographs and any clinical photos of cases at the time of sample submission. These significantly improve the diagnostic accuracy and clinical relevance to enable us to provide the best possible information for you and your client. This is especially true for cytology or histopathology of all bone lesions.

You can send hard copies of pictures with your submission form or email photos /

images to your local laboratory—  
labtown.vetlab@gribbles.co.nz

### Tissues requiring dissection for histology

Submission of large fresh tissues for histopathology that require dissection and fixation prior to histopathology (e.g. entire leg amputations, abortions, heads for brain removal), will incur necropsy and disposal fees based on the necropsy rates in our price list (in addition to the histology fee).

Sending radiographs and full history is very important in leg amputations with tumours that require dissection of the regional lymph node and the bone lesion, as the location of the tumour is not always externally obvious.

Please also let us know if there are any surgical implants in the amputated limb, as these take additional time due to the increased difficulty with dissection.



# Snippets

- **Regional trace element trends** - how are you finding this new feature on your trace element reports? We'd love to hear your feedback!
- **eResults** - our old platform has now been switched off, so if you haven't deleted the old app from your device you may have a bit of trouble accessing your data. Never fear, the answer is here ... simply visit [this link](#) and reset your password to continue on our new platform!
- **Overseas referrals** - with the impact on shipping overseas (especially to Australia) caused by COVID, we put a stop to overseas referral testing. We have however shipped samples overseas last week and they were delivered within an acceptable time-frame. We have decided to resume overseas referrals, but there is still some risk involved. If you would prefer we held on to your samples until shipping becomes completely reliable, please just let us know.



**Gribbles**  
VETERINARY

# Case of the month

## CONTINUED FROM PAGE 2

**Discussion:** Attaching and effacing *E. coli* is most commonly seen in pre-weaned dairy calves between 2 and 10 weeks of age but can also be seen in weaned dairy and beef calves. Enterotoxigenic *E. coli* (ETEC) however, is seen in calves less than seven days of age and causes an osmotic/secretory diarrhoea and no histological changes.

Differential diagnoses for weaned calves include gastrointestinal parasitism, yersiniosis, BVD, adenovirus, coccidiosis or salmonellosis and may occur concurrently with or predispose to AEEC.

In contrast to ETEC where a K99 antigen ELISA is available, no test currently exists for ante-mortem identification of AEEC and histology is required. Due to superficial location of the bacteria on the luminal mucosa, any autolysis will result in false negatives therefore necropsies need to be performed within 30 minutes of death.

Additionally, these bacteria may only be identified in the large intestine, specifically spiral colon (as in this case) which is not often taken by veterinarians during field post mortems. Specifically, one study identified AEEC in 88.4% of spiral colon samples from scouring calves but only in 11.7% of small intestinal samples. Therefore, sacrificial post mortems of moribund calves with immediate fixation of gastrointestinal samples including spiral colon are required (in addition to other fixed and fresh tissues in case other pathogens or diseases are involved). The lumen of the section of intestine to be biopsied should be flushed with formalin first using a 50mL syringe and 18G needle inserted into the lumen. This will immediately fix the luminal mucosa where the bacteria reside maximising the chance of successful identification histologically.

*Thank you to Jason Clark of VetsOne for submission of pristine samples from this interesting case which allowed the diagnosis to be made.*

### References

- Blanchard PC. Diagnostics of dairy and beef cattle diarrhoea. *Vet Clin North Am Food Anim Pract.* 28:443-64, 2012.
- Janke BH, Francis DH, Collins JE, et al. Attaching and effacing *Escherichia coli* infection as a cause of diarrhoea in young calves. *J Am Vet Med Assoc.* 196:897-901, 1990
- Moxley RA, Smith DR. Attaching-effacing *Escherichia coli* infections in cattle. *Vet Clin North Am Food Anim Pract.* 26:29-56, 2010

# Contact us

Contacting Gribbles Veterinary couldn't be easier.

### EMAIL

auckland.vetlab@gribbles.co.nz  
hamilton.vetlab@gribbles.co.nz  
palmerston.vetlab@gribbles.co.nz  
christchurch.vetlab@gribbles.co.nz  
dunedin.vetlab@gribbles.co.nz

### PHONE

0800 474 225

### WEBSITE

[www.gribblesvets.co.nz](http://www.gribblesvets.co.nz)

### FACEBOOK

[www.facebook.com/GribblesNZ](http://www.facebook.com/GribblesNZ)

Last but not least, please feel free to contact your local territory manager:

- Paul Fitzmaurice - Category Manager, Production animals  
[Paul.fitzmaurice@gribbles.co.nz](mailto:Paul.fitzmaurice@gribbles.co.nz) - 027 604 8690
- Chrissy Bray - Category Manager, Companion animals & Analytical  
[Chrissy.bray@gribbles.co.nz](mailto:Chrissy.bray@gribbles.co.nz) - 027 569 1169
- Deborah Bass - Territory Manager  
[Deborah.bass@gribbles.co.nz](mailto:Deborah.bass@gribbles.co.nz) - 027 476 7714
- Eugene van Niekerk - Territory Manager  
[Eugene.vanniekerk@gribbles.co.nz](mailto:Eugene.vanniekerk@gribbles.co.nz) - 027 250 1647