

Paws claws and judder things



December 2021

And that was '21

JAMES RICHARDSON

Another interesting and somewhat challenging year is coming to an end and we would like to thank you for your wonderful support throughout.

Learning and continuing to work in different alert levels (or different colours) has been part of our daily lives again this year. Achieving this and still providing critical services, shows how dedicated and passionate the people who work in this industry are.

One of the factors that makes providing our services so satisfying, is the rapport we build with our clients. This rapport encourages feedback, which in turn helps steer our improvements and innovations. The feedback from so many of you has resulted in a

number of projects leading to improvements in our operational excellence, bringing us closer to you, our clients.

We have a number of ongoing innovative projects and we look forward to the benefits they will bring in 2022. Many of our innovations completed over the past 12 months include the introduction of new technology allowing us to provide additional or improved services, better turnaround times and improvements to our workflows.

Our core focus remains providing quality services that lead to quality patient outcomes. Our highly skilled team of pathologists, scientists and technicians, plus the management team continue to focus on areas that will deliver on this and ensure we're able to provide you with the best possible standard of service.



December and January are always very busy months, so enjoy the rest of 2021, have a safe and festive holiday season, and we look forward to working with you again next year.

Our holiday season opening hours are:

Christmas weekend:

24 December > OPEN
25 - 28 December > CLOSED
29 - 31 December > OPEN

New Year weekend:

1 - 4 January > CLOSED

5 January onwards > OPEN



Faecal egg count reduction test

RACHEL WHITEHEAD

Anthelmintic resistance is a growing issue, therefore investigation of potential resistance is an important tool in managing production-limiting effects on-farm.

At Gribbles Veterinary we are committed to developing tools to promote vet + farmer communication. This season we are launching a **new** faecal egg count reduction test (FECRT) report, which will calculate

anthelmintic susceptibility for different parasites for each drench active group.

You'll be relieved to have no further need for those clumsy manual spreadsheets! This new report is farmer ready, so you can use it as a tool to discuss what is happening onfarm.

In order to receive this report, **both** larval cultures and FECs for all control, pre-drench and post-drench samples must be performed at one of our Gribbles laboratories. This

ensures we have all the data needed to calculate the susceptibility.

To make sure we receive all the information required for this new report, there will also be a new submission form available on our website to use for this testing.

The new FECRT report will be available in early January. If you have any questions please contact your local Territory Manager or Gribbles Veterinary laboratory.

Catching your breath

KATHRYN JENKINS

Clinical history:

A 3-year-old Cavalier King Charles Spaniel presented with a 4-5 week history of respiratory disease. Radiographs demonstrated a diffuse interstitial lung pattern.

Fluid samples from a tracheal wash, material from the endotracheal tube and a FNA from the lung were all submitted for cytologic examination.

Laboratory results:

Cytology of the tracheal wash fluid revealed a mixed inflammatory population (mostly foamy macrophages and neutrophils, with fewer mixed lymphocytes), clusters of ciliated respiratory epithelial cells, including increased goblet cells, and frequent often clustered organisms occurring extracellularly and rarely phagocytosed with both neutrophils and macrophages.

Organisms were round to ovoid, 4-5 μ m in diameter, pale blue with a small magenta nucleus (Figure 1). Rarely fewer cystic forms (containing 8 intracystic bodies) were observed (Figure 2). One smear was stained with a special stain (Gomori methenamine silver), which highlighted the organisms with a characteristic 'crushed ping pong ball' appearance (Figure 3).

Diagnosis:

The characteristic cytologic findings were

Figure 1.

consistent with Pneumocystis species.

Discussion:

Pneumocystis sp. are a species specific fungal organism that can act as commensals, opportunists, or pathogens of the respiratory tract, in a wide range of mammalian hosts, including dogs. In cases of immune suppression the organism can become an opportunist pathogen, associated with clinical signs of pneumonia.

In dogs, pneumocystis pneumonia can be a life-threatening disease, with organisms filling alveolar spaces and causing an associated florid inflammatory response within the pulmonary interstitium. Reported disease cases are few in the literature, and prevalence studies in healthy dogs have yet to be performed for this organism (Best, 2019). The majority of cases in dogs have been reported in young adult Cavalier King Charles Spaniels, with smooth and wirehaired Miniature dachshunds also being predisposed. Interestingly, co-existing demodicosis is found in many cases, indicating the potential for immune dysregulation. In dogs, Pneumocystis canis has recently been characterised via molecular techniques.

Diagnosis has traditionally required identification of *Pneumocystis* 'cysts' on bronchoalveolar lavage samples, or transthoracic FNA samples of lung. Freshly prepared smears from fluid or FNA samples are important to be able to identify this organism, as poorly preserved organisms can mimic platelets in the background of the smear. Panfungal PCR and human PCR for *Pneumocystis jirovecii* do not reliably detect canine *Pneumocystis* infections. A species specific PCR for dogs has recently been developed for research purposes in Australia (Danesi, 2017).

Early treatment with antibiotics (e.g. trimethoprim-sulphonamide) may be successful in some cases. The patient in this case responded quickly to treatment and went on to a full recovery.

Figure 1: Pneumocystis organisms (black arrows) are round to ovoid, 4-5 um in diameter, pale blue with a small magenta nucleus. They can mimic the appearance of platelets, especially when low in number.

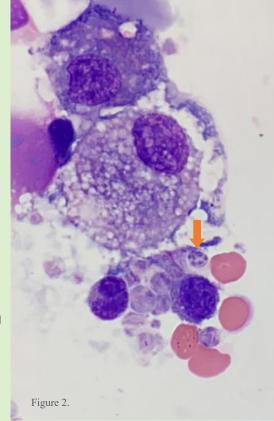


Figure 2: Pneumocystis cystic forms (containing 8 intracystic bodies, orange arrow) help confirm the diagnosis.

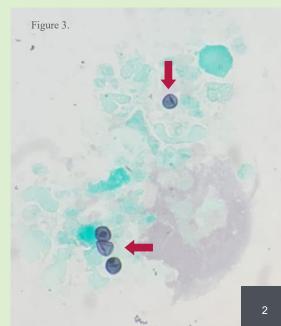
Many thanks to Julia Giles, Totally Vets, Feilding, for this interesting case.

References:

Best MP, Boyd SP, Danesi P. Confirmed case of Pneumocystis pneumonia in a Maltese Terrier × Papillion dog being treated with toceranib phosphate. *Australian Veterinary Journal*, 97:162-165, 2019.

Danesi P, Ravagnan S, Johnson LR *et al.* Molecular diagnosis of Pneumocystis pneumonia in dogs. *Medical Mycology* 55:828-842, 2017.

Figure 3: Gomori methenamine silver stain (GMS), highlights the Pneumocystis organisms in black, with a characteristic 'crushed ping pong ball' appearance (red arrows).



Summer's here, is facial eczema?

Summer is upon us and it is never too early to ensure plans are in place to protect the herd. To be effective, preventative measures need to be in place **before** *Pithomyces chartarum* spores are found.

We offer diagnostic testing to assist with monitoring facial eczema (FE)
risk, minimising the

incidence of disease,
checking your
management
programme is
working and
assessing the
damage
caused by
sporidesmin
toxin from
ingested

spores

Testing options available include:

- > Spore counts (pasture and faeces)
- > Individual GGT and zinc testing

With our online Lab-portal, you can submit your local spore counts to the national database. FE data is displayed in real-time in the Lab-portal, so you will be kept up-to-date with the latest local and national trends. All veterinary clinics are eligible to register for a user account and we encourage you to do so. The more data that is received in the portal, the better the indication of risk in your region.

See full details of how you can keep on top of facial eczema in the article and information sheet <u>located on our</u> website here.

Courier delays

Courier freight volumes are at an all time high across the country, due to the COVID situation. This is causing major delays in the larger regions like Auckland, Hamilton, Tauranga, Wellington and Christchurch.

These delays will impact the time it takes for your samples to reach your local laboratory, as well as affecting our labs as we refer samples around our network for testing. As a result, the turn-around-time for some tests may be longer than usual.

Please be patient with courier drivers and our laboratory staff. Like you, we're working in difficult circumstances, but every day we do the best that we possibly can to get results to you as quickly as possible.

It mite be something interesting

REBECCA ALLAN

A recent case submitted to the Christchurch laboratory had us itching to reach a diagnosis.

Clinical history:

The patient was a 10-year-old Gypsy x Welsh Cob with longstanding inflammation of the pasterns. The veterinarian had taken skin scrapes and submitted smears to the

laboratory for cytology.

Laboratory findings:

Examination of smears revealed a seething mass of mites in various stages of maturity (Figure 1.) Morphology of the mites were consistent with *Chorioptes bovis*, leading to a diagnosis of chorioptic mange.

A video of the mites can be seen here.

Discussion:

This is the most common cause of mange in horses, occurring in all breeds, but with a predisposition in draught horses with feathered fetlocks. Infection with these chewing mites causes pruritic skin lesions resulting in papules, crusting and alopecia and secondary bacterial dermatitis in some cases. Mites can spread to stable and paddock mates, either directly or indirectly e.g. by shared use of grooming equipment.

Treatment recommendations include clipping of long hair, shampooing or scrubbing of affected skin and use of topical and injectable parasiticides. The horse in this case had a complete recovery following treatment with two doses of Dectomax® (doramectin).

Thank you to Becky Sutorius from Rangiora Equine Services for this submission and for clinical feedback on this case.

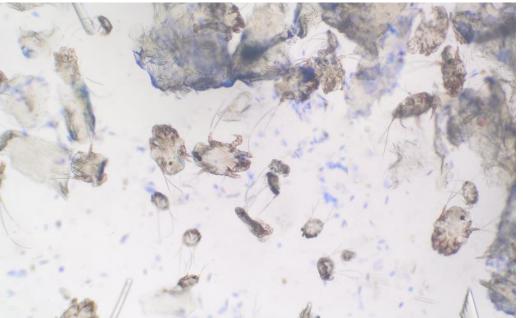


Figure 1. Numerous Chorioptes bovis mites visualised on microscopy.

Consumable of the month

Do you order laboratory consumable items from us online or via our order form? If you need just one blood tube or swab, or enough for a herd, we've got you covered.

Our featured consumable item this month is the ever trusty **70mL sample pottle.**

This sample container is suitable for so many sample types - urine, faeces, fresh tissue, hair, skin scrapes, lumps and bumps, nails, milk, body fluids (please no blood or samples for cytology). We highly recommend you have a stock of them in the clinic.

So often we receive samples inappropriately packaged in surgical gloves, zip-lock bags, envelopes, jam jars, hummus containers etc. and while the latter two are acceptable for non-sterile samples, the first three are not acceptable at all. The samples we usually receive in surgical gloves and plastic bags are most often faeces, which

makes them even more hazardous! So please load yourself up with a bunch of these so you always have them on hand. They are literally cheaper than chips, so there really is no excuse.

If you would like to be in to win a few of these, make sure you stay tuned to our <u>Facebook page</u> and enter the giveaway this month.



For a laugh!

If you follow us on Facebook, you'll be familiar with our regular Friday slot. Here's something seasonal to finish this newsletter off with.

... and if you don't follow us, <u>head</u> over and hit the LIKE button now!



Expect delays with Allercept testing - our offshore subcontractor is experiencing issues with reagent supply. A new delivery is expected this week, but there is a back-log of tests to perform. Thank you for your understanding.









Contact us

Contacting Gribbles Veterinary couldn't be easier.

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