

#### **NOVEMBER 2015**

# New lipase test introduced at Vetpath

Serum lipase activity has historically been the most useful parameter for diagnosing acute pancreatitis in dogs. However, the sensitivity and specific of serum lipase activity is relatively low.

The development of the specific canine pancreatic lipase (Spec cPL) test has resulted in a more sensitive and specific parameter for detection of pancreatitis in dogs. However, the spec cPL and the patient side SNAP cPL are not routinely available as part of the biochemistry panel.

A new lipase assay has been developed using a novel substrate which is more specific for pancreatic lipase than previous lipase assays. The

DGGR lipase activity has been found to have excellent agreement with the Spec cPL. This agreement correlates with a higher sensitivity and specific of DGGR lipase for diagnosis of acute pancreatitis in dogs.

Vetpath has been running the DGGR lipase in conjunction with the traditional lipase assay while we evaluated the new lipase results. Analysis of the data revealed encouraging results and Vetpath will be exclusively running the DGGR lipase assay in dogs from early November. Validation of the assay for cats will also occur in the next few months, after which DGGR lipase will be included in the complete feline biochemistry panel.

Vetpath encourages feedback about how the new DPPG lipase activity performs in clinical cases. Please call the laboratory to speak with a pathologist if you have any questions or feedback about this new test.

Reference: JVIM 2014:28:863-870.

## Feline thyroid panel

Vetpath currently has two feline thyroid panels designed for diagnosis of hyperthyroidism and then monitoring treatment.

To reduce confusion about which panel to request, Vetpath will be combining these two panels into one single panel. The feline thyroid panel will now include total T4, ALT, ALP, urea, creatinine, urine SG and a urine dipstick. This will allow assessment of the liver, kidneys and total T4 in cats that are suspected of having hyperthyroidism and those already on medication.



Vetpath Laboratory Services welcomes feedback on all aspects of our service from couriers to lab results. Please feel free to contact us at 9259 3666 or email enquiries@vetpath.com.au

### Labelling of slides

All samples submitted to Vetpath, including cytology smears, should be labeled accurately to help prevent errors.

Each slide should be labeled with the name of the patient and the site of the lesion (see figure 1). This is important when multiple sites are aspirated. We suggest labeling slides with pencil as this will not wash off during the staining process.



Figure 1. Slide labeled with pencil.

The slide holders should also be labeled with the name of the patient, submitting clinic and site of the lesion with permanent marker pen (see figure 2).



**Figure 2.** Slide holder labeled with permanent marker.

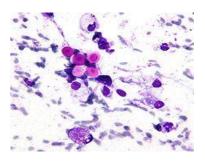
### Paired Cryptococcus antigen titres

The Cryptococcus antigen titre by latex agglutination (LCAT) is a rapid, sensitive method of diagnosing *Cryptococcus sp* infection in veterinary species.

The LCAT is particularly useful as it detects Cryptococcal capsule antigens. Therefore, a positive result is indicative of infection and not just exposure to the organism. The test detects antigen from all serotypes of *Cryptococcus sp*, and can be used in all veterinary species.

One disadvantage of the test is inter-assay variation; however this can be eliminated by performing paired titres. An aliquot from the original pretreatment sample can be frozen and then re-run with the follow up sample after 3 months of treatment. Removing the interassay variability will allow more accurate comparison of titres over the course of the treatment. A reduced fee will be charged for the second sample.

Aliquots from the first serum sample must be frozen and retained by the submitting clinic. Please note that haemolysed serum is not suitable for LCAT testing and that whole blood should not be frozen for later analysis.



# Protein measurement in non-domestic veterinary species

Albumin is routinely measured by chemistry analysers by its ability to bind to bromocresol green (BCG). This method is accurate in most mammals; however there is some species variation in the accuracy of this assay

Falsely high albumin values are seen in samples from new world monkeys (e.g. lemurs) and rabbits, whereas low values are seen with birds. Therefore, species variation should be considered when interpreting protein concentrations in non-mammalian species.



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