

**Vetpath** is a specialist veterinary laboratory dedicated to providing our clients with the finest laboratory diagnostic service. A team of veterinary pathologists and medical scientists with extensive experience in veterinary diagnostic pathology forms the core of the Vetpath team.

# VN News

## FEBRUARY 2021 COVID-19 Update

Perth Metropolitan area, Peel and South West regions have entered a 5 day full lock-down until 6pm Friday 5<sup>th</sup> February

**As an essential service, testing at our main laboratory in Ascot will proceed as normal.**

Where possible, we ask that samples are placed in a lockbox or esky, and that you specify this and any other pickup instructions at the time of booking our courier with one of our personnel on 08 9259 3600. As well, please assist us by providing any changes to your clinic operating hours or days of operation by emailing [Vetpath.Reception@vetpath.com.au](mailto:Vetpath.Reception@vetpath.com.au)

If you have any further questions, please do not hesitate to contact the Vetpath team.

## Current Concepts in the Management of Urinary Tract Infections

**Dr. Alison Stickney**  
BVSc(hons) MVS MANZCVS  
DACVIM PhD  
Small Animal Medicine  
Specialist, Peninsula Vet  
Emergency & Referral  
Hospital

Over the past few years, our understanding of bacterial urinary tract infections (UTI) has expanded, leading to the revision of recommendations for managing UTI in companion animals. The most notable development is the advancement in our understanding of the urinary microbiome, and the distinction between subclinical bacteriuria and urinary tract infection.

Subclinical bacteriuria is defined as the *“presence of bacteria in urine as determined by positive bacterial culture from a properly collected*

*urine specimen, in the absence of clinical evidence of infectious urinary tract disease”* (Weese et al., 2019). This has been shown to occur in up to 12% of healthy dogs, and 13% of healthy cats, with an increased prevalence in animals with comorbidities such as diabetes mellitus, obesity, immunosuppressive disorders or neurological conditions (Wan et al., 2014; White et al., 2016). Treatment is not recommended for patients with subclinical bacteriuria, even if pyuria is also present. This recommendation is based on findings that indicate poor efficacy of therapy, no correlation with outcome, and possibly an increased risk for subsequent clinically significant infection with resistant bacteria.



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Distinct from subclinical bacteriuria, is the diagnosis of UTI. For a positive urine culture to be considered clinically significant, the animal must also have signs of inflammation on urinalysis AND be displaying signs of lower urinary tract disease (e.g. pollakiuria, stranguria). A UTI is considered 'sporadic' when the animal is presenting infrequently (<3 times in the past year). **A short (3-5 day) course of amoxicillin or a trimethoprim-sulfonamide is appropriate for empirical treatment of sporadic bacterial cystitis, even when comorbidities (such as diabetes mellitus) are present.**

When infections are recurrent, further investigation is advised to rule out predisposing causes, with particular attention paid to differentiating between reinfection (different bacteria) and relapsing / persistent infections (same bacteria). When reinfection is occurring, short courses of antibiotics are still appropriate, but the underlying cause should be addressed where possible. A relapsing infection may necessitate the use of a more prolonged course of therapy, removal of a nidus of infection, or treatment with a lipid soluble drug with increased tissue penetration.

Urine culture on a cystocentesis sample is indicated when clinical signs of lower urinary tract disease are present. The

detection of bacteriuria on microscopy is not sufficient to diagnose a UTI, as false positives (and false negatives) can occur on cytology (Swenson et al., 2011). Repeat urine cultures are only necessary after treatment of a UTI if clinical signs have not resolved, or if the signs recur. In the absence of clinical signs, bacterial culture is generally only recommended in cases of suspected pyelonephritis, where struvite urolithiasis is confirmed, prior to invasive urological procedures or when investigating an animal for systemic infection (Weese et al., 2019).

For more information on this topic, please refer to the revised guidelines published by The International Society of Companion Animal Infectious Diseases (2019), as well as the American College of Veterinary Internal Medicine's consensus statement on therapeutic antimicrobial use (2015).



**Struvite crystals**

**References available on request.**

## Faecal occult blood

The faecal occult blood test currently offered at Vetpath has been discontinued. Unfortunately, the newer tests are specific for human haemoglobin and an alternative test suitable for veterinary species is not available.

The routine faecal analysis will no longer routinely include the occult blood test. For a short time, faecal occult blood will be available on request. Once the remaining test kits have been used, the test will no longer be available.

The faecal analysis will now include a wet microscopy, a concentration for cysts and ova and a Gram stain. A faecal egg count will also be performed on samples from large animals.

We apologize for the inconvenience and will continue to search for an alternative kit.



### VETERINARY PATHOLOGISTS

Jenny Hill BVSc (Hons) Dip ACVP, John Jardine BVSc MMedVet (Path) Dip MRCVS,  
Celia Smuts BVSc MVS MSc PhD ACVP, Jason Stayt BSc BVSc Dip ACVP, Leanne Twomey BSc BVMS (Hons) PhD Dip ACVP,  
Audra Walsh BSc BVMS Dip ACVP,  
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