



Best Practice Urine Testing

We now receive in excess of 500 urine samples into our microbiology laboratory on a daily basis. While a lot of these samples are clinically justified, it is also clear that there are many urine samples where laboratory processing is unnecessary. Here is a summary of which urine samples should be sent to us.

When to Send a Urine Sample to the Microbiology Laboratory

UTIs defined as “complicated”, and therefore requiring laboratory culture, include patients in the following groups who have symptoms of a UTI:

- Men
- Children
- Suspected pyelonephritis (flank pain, fever)
- Persistent symptoms despite treatment
- Pregnant women
- Recent urinary tract instrumentation
- Catheterised patient (where systemic symptoms are present)
- Structural & functional abnormality of the urinary tract
- Significant renal impairment
- Immunocompromised patient

When NOT to Send a Urine Sample to the Microbiology Laboratory

- Uncomplicated UTI
It is generally well accepted that urine culture is not necessary for most cases of uncomplicated UTI (<http://www.bpac.org.nz/Supplement/2006/July/uti.aspx>) and that empirical treatment for these patients is acceptable practice. This is usually with either a short course of trimethoprim or nitrofurantoin. (See reference <http://www.bpac.org.nz/Supplement/2013/July/antibiotics-guide.aspx>)
- Follow up urine, if the patient’s symptoms have settled
- In a catheterised patient with smelly/cloudy urine but without systemic symptoms. (Change the catheter in the first instance)
- Regular (e.g. 6 monthly) urine screening in an asymptomatic patient

Clinical Details and Urine Samples

Less than 50% of urine samples that arrive into the laboratory are accompanied by clinical details. Even when clinical details are received on urine samples, they are often cursory in nature (e.g. “?UTI”).

People sometimes wonder why clinical details are necessary for urine cultures...

However, they are important!

A brief summary of the patient’s specific symptoms, accompanied by any other useful information such as pregnancy, immunocompromising conditions, current antibiotics, allergies, etc. all contribute to how the sample is processed in the laboratory, what susceptibilities are performed, and how the result is reported back to the requestor.

Put simply, by including succinct clinical details to contextualise the nature of the requesting, the result can be optimised for your patient.

The request form is viewed at various stages throughout the testing process, and we would strongly recommend clinical details to be included for all urine samples that are submitted to the laboratory.

Many thanks!

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CLINICAL UPDATE