AOTEA NEWS
- CLINICAL UPDATE
AOTEA PATHOLOGY
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Improved turn-around times for urinalysis

A new streamlined process, beginning on 30 July 2013, will significantly reduce the turn-around time for urinalysis and will permit greater attention to those samples which are likely to be clinically significant.

For several years the statement "urinary infection unlikely in the absence of pyuria" has been appended to reports when the enzyme leucocyte esterase (part of the "dip-stick" analysis) has not been detected in urine samples. Analysis of our database shows that lack of this enzyme correlates with absence/very low numbers of leucocytes which in turn correlates with absence of bacteriuria and, therefore, of infection.

From 30 July 2013, urine samples which have no white cells (equivalent to a leucocyte esterase cut off of <25 leucocytes/ microlitre) will no longer be cultured for uropathogens. The leucocyte esterase estimation will be utilised as a sensitive predictor of culture-negative urine and will be adopted as our "screening test" for setting up urine cultures. Negative results will be issued immediately on completion of this screening test rather than waiting for a negative culture result. This will shorten the turn-around time for these cases.

Exceptions to this rule are:

- Screening for asymptomatic bacteriuria of pregnancy (currently around week 12)
- Investigation of patients with neutropenia
- Patients with clinical indication of pyelonephritis

When you find dip-stick in practice to be negative please do not send for culture unless your request meets the above criteria. In the above situations, the laboratory request form should clearly state the requirement for performing bacterial culture as those with negative leucocyte esterase tests will not be routinely cultured.

Microscopy will no longer be routinely performed on all samples. You must specifically request microscopy and provide clinical information in situations where a microscopy result is required e.g. for investigation of pathogenic casts.

These changes to our laboratory protocols, when used in conjunction with the bpac recommendations for urinalysis, will allow us to better focus on the emerging problems of antibiotic resistant urinary infections.

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