

Diagnosis of UTI in Adults - Quick Reference Guide	
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Ratified by	Nottingham Antibiotic Guidelines Committee
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Evidence base	 Local microbiological sensitivity surveillance Recommended best practice based on clinical experience of guideline developers
Changes from previous Guideline	Formal assessment of clinical features of UTI added to algorithm.
Inclusion criteria	 Adult patients where UTI is within the differential diagnosis
Distribution	 This guideline will be available on the Trust antibiotics guidelines websites: http://nuhweb/antibiotics and http://www.nuh.nhs.uk/antibiotics Laminated and displayed on appropriate adult wards. This guideline will be included in the NUH Formulary update
Local contacts	Dr V Weston Consultant Microbiologist

This guideline has been registered with the Trust.

Clinical guidelines are guidelines only. The interpretation and application of clinical guidelines will remain the responsibility of the individual clinician. If in doubt contact a senior colleague. Caution is advised when using guidelines after a review date.

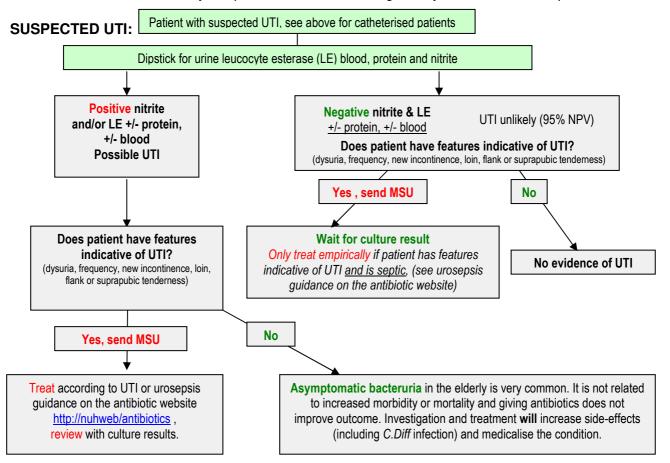
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INTRODUCTION

Dipstick urinalysis with nitrite and leucocyte esterase (LE) provides a useful and quick near-patient-test for the exclusion of Urinary tract infection (UTI) – 95% negative predictive value (NPV) if both nitrite and LE negative. However they are slightly less specific with a positive predictive value (PPV) if either one or both are positive of around 40-60% with random testing, therefore a positive result should be confirmed by microbiological examination in hospital in or outpatients who are at higher risk of having a complicated or resistant infection and clinical assessment is also required.

UTI can only be proven bacteriologically in 50% of women with symptoms of UTI, others have inflammation of the urethra – the 'so called' urethral syndrome. Antibiotics do not hasten the clinical response in urethral syndrome.

In **catheterised patients a** positive dipstick urinalysis is normal and unhelpful, avoid unnecessary samples and treatment of bacteriuria, only sample/treat culture result if signs of systemic infection are present.



ASYMPTOMATIC BACTERURIA

Asymptomatic bacteruria in the elderly is very common and is not related to increased morbidity or mortality. Investigation and treatment will increase side-effects and medicalise the condition.

Screening for asymptomatic bacteruria: Screening of asymptomatic bacteruria and treatment if positive is indicated at least once in early pregnancy and in those who are to undergo urological procedures where mucosal bleeding is expected e.g. TURP.

References

- 1. Devillé WLJM et al The urine dipstick test useful to rule out infections. A meta-analysis of the accuracy. *BMC Urology* 2004 available from http://www.biomedcentral.com/1471-2490/4/4 accessed 6.4.2006
- 2. Patel HD et al, Can urine dipstick testing for urinary tract infection at point of care reduce laboratory workload? J Clin Pathol 2005;58:951-954
- 3. ISDA guidelines for the Diagnosis and Treatment of Asymptomatic Bacteriuria in Adults CID 2005; 40:643-54