

IPC Bulletin for GP Practice Staff

North Yorkshire

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To further support GP staff, here is some information on good infection prevention and control (IPC) practice.

Diagnosing Urinary Tract Infection in a Care Home Resident

Bacteria in the urine (bacteriuria)

Many people over the age of 65 years and those with a long-term catheter, have bacteria in their urine (bacteriuria). Usually these bacteria live harmlessly in the bladder and do not cause any symptoms of urinary tract infection [UTI] (asymptomatic bacteriuria). Antibiotic treatment is not required in these patients, unless they go on to develop signs and symptoms of UTI.

Using urine dipstick to diagnose UTI

Bacteria, when present in urine, produce an enzyme which turns nitrates into nitrites. A positive nitrite result on a dipstick does not distinguish between asymptomatic bacteriuria and a genuine UTI. Pyuria (presence of white cells) in the urine is also common in patients with bacteriuria, but does not necessarily indicate presence of UTI.

Therefore, use of urine dipstick to diagnose UTI is **not** recommended in older people, and can result in inappropriate treatment with antibiotics. If dipstick is performed, only a negative result may be useful in **excluding** UTI.



Signs and symptoms of UTI

In a patient without a catheter, UTI is likely if the patient has two or more of the following symptoms:

- Pain on passing urine
- Need to pass urine urgently
- New or worsening urinary incontinence
- Need to pass urine more frequently
- Visible blood in urine
- Shivering, chills, or a temperature less than 36°C or above 38°C
- New or worsening confusion or agitation
- Lower abdominal, flank or back pain

In a patient with a urinary catheter, a UTI is likely if the patient has one or more of the following symptoms:

- Shivering, chills or a temperature less than 36°C or above 38°C
- New pain or tenderness in the flanks or lower back
- New or worsening confusion or agitation

Offensive smelling or cloudy urine is not a symptom of UTI.

Specimen collection

- Only send a specimen of urine for culture if the patient has signs or symptoms of UTI.
- Use a specimen bottle containing boric acid (red top).
- Request microscopy, culture and sensitivities (M,C&S). Include details of the symptoms, onset date, current or intended antibiotics, antibiotic allergies and relevant medical history.



Preventing inappropriate antibiotic treatment

For patients with symptoms of UTI (as above), a specimen of urine should be taken for M,C&S and antibiotic treatment commenced in accordance with local antibiotic prescribing guidelines (see [North Yorkshire Antibiotic Prescribing Guidelines for Primary Care](#)). When results of the urine culture are available, antibiotic treatment should be reviewed.

Treatment of patients who have bacteriuria, but are asymptomatic, will do more harm than good, with the risk of becoming colonised with multi-resistant organisms or acquiring *Clostridium difficile* infection.

Visit our website to find lots of IPC resources, many of which are free to download.

www.infectionpreventioncontrol.co.uk

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