

Referral Support Service

Urology

UR05

Recurrent UTI's in women (non-pregnant)

Definition

- Recurrent cystitis is usually defined as *three episodes of urinary tract infection (UTI) in the previous 12 months*, or two episodes in the previous six months. It is common in young, healthy women.
- This excludes management of pregnant women and catheterised patients.

Exclude Red Flag Symptoms

- Recommended for women with *recurrent UTIs associated with haematuria* (NVH or frank) ([investigations to exclude urological cancer](#)).
- *Acute pyelonephritis*: consider admission for any woman with loin pain, rigors and fever, especially with poor oral intake/ vomiting.

Management

- Smoking cessation to be encouraged.
- Weight loss (if appropriate) to be encouraged.
- Advise patient regarding symptomatic relief using analgesics such as **paracetamol** and/or **ibuprofen**.
- Initiate treatment:
 - For a woman with mild symptoms who has normal immunity, normal renal function, and a normal renal tract, treatment can be delayed if she wishes to see if symptoms will resolve without treatment, especially if the probability of a UTI is low (indicated by a negative urine dipstick test for nitrites, and leucocyte esterase).
- For all other women start treatment without delay taking into account allergies and renal function. Prescribing guidance:

Local antibiotic guidance says:

[Antimicrobials-prescribing](#)

'Discuss options with a Clinical Microbiologist'

Start a 3-day course of either:

- **Nitrofurantoin (standard release) 50 mg four times daily OR**
- **Trimethoprim 200 mg twice daily**

- If the woman has been treated with trimethoprim up to a year previously, consider prescribing nitrofurantoin instead of trimethoprim,
- **Pirmecillinam** should be reserved as third-line antibiotic (in light of increasing multi-resistance). If **pivmecillinam** indicated, use higher dose i.e. **400mg TDS**
- Prescribe a **5–10-day antibiotic course** for women who have:
 - Impaired renal function.
 - An abnormal urinary tract (for example renal calculus, vesicoureteric reflux, reflux nephropathy, neurogenic bladder, urinary obstruction, or recent instrumentation).
 - Immunosuppression (for example because they have poorly controlled diabetes mellitus or are receiving immunosuppressive treatment).
- For all other women, a **3-day course of antibiotics** is sufficient.
- Do not use **fosfomycin** without discussion with microbiology
- Advise the woman to **submit an MSU** before starting the treatment
- **Prophylaxis:**
 - The North Yorkshire Primary Care Guidance discourages **prophylaxis** and indicates it should normally only be used after discussion with a microbiologist. This allows a review of the frequency of infections and the nature of the infecting organisms.
 - Persisting infection with the same organism often suggests a focus in the renal tract and a 2 week course of appropriate therapy may be indicated rather than longer term use of antibiotics.
 - Infection with multiple different organisms suggests repeated re-infection perhaps due to host defence problems or anatomical/functional problems with the lower urinary tract. Use of **prophylaxis** in patients with repeated re-infection rather than relapsing infection often fails quickly due to selection of resistant pathogens in the bowel which then go on to invade the bladder.
 - The best defence against recurrent UTI is probably a healthy gut flora which tends to be compromised by repeated exposure to antibiotics.
 - Though NICE in their 2015 CKS guidance currently say 'Do not recommend cranberry products or urine alkalinizing agents' there is anecdotal and some research evidence of patients getting relief from these products and they have obvious advantages over use of antibiotics. The article [here](#) on NHS choices may be helpful in enabling patients to make an informed decision and it wisely concludes 'the decision to try cranberry juice or not will need to remain an individual one'.

Referral Information

- **Routine referral** is recommended for women with recurrent UTIs:
 - Who have a risk factor for an abnormality of the urinary tract including women with:
 - A past history of urinary tract surgery or trauma.
 - A past history of bladder or renal calculi.
 - Obstructive symptoms such as straining, hesitancy, poor stream.
 - Urea splitting bacteria on culture of the urine such as Proteus or Yersinia.
 - Persistent bacteriuria despite appropriate antibiotic treatment.
 - A past history of abdominal or pelvic malignancy.

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- Symptoms of a fistula such as pneumaturia.
- Who are immunocompromised or who have diabetes.
- Who have a known abnormality of their renal tract who might benefit from surgical correction, such as cystocele, vesicoureteric reflux, or bladder outlet obstruction.
- Who have not responded to preventive treatments.
- Consider routine referral for bladder cancer in women aged 60 and over with recurrent or persistent unexplained urinary tract infection.
- MSU should be sent in all women with recurrent UTIs.
- Investigations prior to referral: Baseline USS.

Patient information leaflet

[PatientUK Recurrent UTI patient information](#)

References

[CKS NICE guidance](#) (July 2015)