

Guideline for the Management of Urinary Tract Infection in Non-Pregnant, Adult Outpatients

Signs or symptoms suggestive of UTI present: urinary frequency, urgency, dysuria, suprapubic pain, or hematuria

Any of the following present:

Male gender	Immunosuppression	Azotemia
Systemic symptoms	Nephrolithiasis	Urinary catheter
Symptoms >7 days	Urinary obstruction	Recent treatment failure
Diabetes mellitus	Anatomical GU abnormality	Recent hospitalization
Recent GU instrumentation	Clinical concern for pyelonephritis	

No

Yes

Uncomplicated UTI¹

Complicated infection

Urine culture generally not indicated

Clinical evidence of pyelonephritis?

- Fever	- Nausea/vomiting	- Leukocytosis
- Flank pain	- CVA tenderness	

No

Yes

Complicated UTI²

Pyelonephritis¹

Nitrofurantoin 100mg PO BID for 5 days⁶
(nitrofurantoin is contraindicated if creatinine clearance <60 mL/minute)

- Obtain urinalysis and culture (+/- gram stain)
- Blood cultures if systemic signs/symptoms

Assess risk factors for fluoroquinolone resistance³:

- 1) Hospitalization in previous 12 months? OR
- 2) Fluoroquinolone use in previous 12 months?

Yes

No

Ceftriaxone 1gm IV or IM daily until organism and susceptibility known^{5,6}, OR Amikacin 10mg/kg IV or IM daily if *Pseudomonas* likely⁴ or if serious cephalosporin allergy

Levofloxacin 500mg or 750mg PO daily^{5,6}

Adjust antibiotics based on organism/susceptibility

1. Likely pathogens: *E.coli*, *Klebsiella*, *Proteus*, *Enterobacter*, *Citrobacter*, *S. saprophyticus*
2. Likely pathogens: same as uncomplicated + *Pseudomonas*, *Enterococcus*
3. Each week of previous hospitalization or antibiotic use is associated with a two-fold increase in the likelihood of resistance to fluoroquinolones
4. Consider if recent hospitalization, long term care, previous UTI with *Pseudomonas*, or chronic urinary catheter
5. Gram-positive cocci by gram stain or culture suggestive of enterococci → add amoxicillin 500mg PO Q8hrs
6. Suggested dosing is for **normal renal function**, all treatment options except ceftriaxone must be adjusted for renal impairment.
7. Uncomplicated pyelonephritis may be treated with 5 days of levo 750 daily

If quinolone-resistant AND ceftriaxone-susceptible organism:
Cefixime 400mg PO BID
*not for empiric use for suspected quinolone resistance

Treatment duration varies by clinical scenario: 7-14 days⁷