

SHOULD THIS PATIENT BE EVALUATED FOR A URINARY TRACT INFECTION?*

Does the patient have any of the following *without alternate explanation*?

1. Urgency, frequency, dysuria
2. Suprapubic pain or tenderness
3. Costovertebral pain or tenderness
4. New onset mental status changes with leukocytosis ($WBC > 10 \times 10^9/L$), or hypotension ($SBP < 90\text{mmHg}$), or ≥ 2 SIRS criteria
5. Fever $> 38^\circ\text{C}$ or Rigors
6. Acute hematuria
7. Increased spasticity or autonomic dysreflexia in a spinal cord injury patient

YES

Send UA and, if positive, send Urine Culture**

Document indication for sending urine culture

Start empiric therapy (see reverse side)

NO

Do **NOT** send urine testing

*Symptom-based screening may not be reliable in the setting of renal transplants or urinary diversion. Additionally, please use your clinical judgement in patients with severe sepsis/septic shock or with baseline cognitive or functional impairment with new functional decline or falls who are hemodynamically unstable without alternative etiology.

** Urine culture alone is appropriate for febrile neutropenia and ASB screening for pregnancy or prior to urologic procedures.



Nonprofit corporations and independent licensees of the Blue Cross and Blue Shield Association



EMPIRIC THERAPY BASED ON CLASSIFICATION OF URINARY TRACT INFECTION

Empiric choices should take into account previous cultures, antibiotic allergies, local antibiotic susceptibilities, and severity of illness.

If urine culture is negative & patient was on antibiotics at the time of culture & patient has symptoms (1-7 on the reverse side), it may be appropriate to treat.

PATIENT CATEGORY	PREFERRED**	ALTERNATIVES	DURATION
ASYMPTOMATIC BACTERIURIA* Defined as having NONE of the symptoms (1-7) listed on reverse side	Treatment indicated during pregnancy and prior to urologic procedures		
UNCOMPLICATED LOWER UTI (CYSTITIS)***	Nitrofurantoin or TMP/SMX	Fosfomycin IV or Oral Beta-Lactam (e.g. Cephalexin or Cefpodoxime)	Nitrofurantoin x 5 days (avoid in CrCl < 30 mL/min) Fosfomycin x 1 dose TMP/SMX x 3 days IV or Oral Beta-Lactam x 3-7 days
COMPLICATED LOWER UTI (CYSTITIS)*** Male, urinary catheter present or within last 48 hours, anatomic abnormality or obstruction, significant co-morbidities	Nitrofurantoin, Fosfomycin, or TMP/SMX, Oral Beta-Lactam or IV Beta-Lactam, Severe PCN or <u>Cephalosporin Allergy:</u> Aztreonam		Nitrofurantoin x 7 days (avoid in CrCl < 30 mL/min) Fosfomycin (q48h) x 3-5 doses TMP/SMX x 7 days Oral Beta-Lactam, IV Beta-Lactam, or Aztreonam x 7 days
UNCOMPLICATED PYELONEPHRITIS	TMP/SMX, Fluoroquinolones, or Beta-Lactams		IV Beta-Lactam Therapy followed by Oral Beta-Lactam or Oral TMP/SMX therapy : 7-14 days IV Beta-Lactam Therapy x 7 days TMP/SMX x 7-14 days Fluoroquinolones x 5-7 days
COMPLICATED PYELONEPHRITIS, UTI WITH BACTEREMIA & SEPSIS	Defer to Individual Institutions		Complicated Pyelonephritis : 7-14 days UTI with Bacteremia : 7-14 days [Shorter courses of therapy (7 days) with a fluoroquinolone or IV beta-lactam can be considered in patients with uncomplicated bacteremia secondary to pyelonephritis or cystitis/lower UTI and have rapid clinical response to therapy.]

*refer to reverse side for conditions when symptom based screening may not be appropriate

**preferred therapies should reflect local antibiogram data for *E.coli* >80% susceptible

*** excludes patients with sepsis and bacteremia

Follow culture results and de-escalate therapy based on final results and sensitivities.

FOR EACH ANTIBIOTIC: DOCUMENT INDICATION AND PLANNED DURATION FOR ALL PATIENTS.

For more detail about these guidelines, please see the [Guidelines for Treatment of UTIs](#) published by HMS.