

Uncomplicated Urinary Tract Infection/Cystitis

Definition: Clinical symptoms of urinary tract infection (dysuria/urgency/frequency/hematuria) in non-pregnant, immunocompetent, neurologically-intact **women** with normal urologic anatomy and no indwelling urinary catheters. Urinary tract in men are, by definition, considered complicated.

Initial work-up/assessment:

1. Assessment of urinary symptoms
2. Urinalysis + reflex urine culture (culture if patient is admitted or has recurrent UTIs)
 - Non-reflex urine culture may be obtained for pregnant patients, neutropenia patients and patients undergoing urologic procedures

Empiric therapy:

1. Bactrim: one double-strength tablet (160/800 mg) PO BID x3 days
2. Nitrofurantoin monohydrate: 100 mg PO BID x 5 days (avoid if any concern for pyelonephritis or if creatinine clearance <60)

Alternative therapies

1. Fosfomycin: 3 grams of powder mixed in water as a single PO dose (avoid if any concern for development of pyelonephritis) *Note: Sensitivities must be requested of microbiology lab*
2. Cefdinir: 300mg PO BID x 5 days
3. Amoxicillin-clavulanate: 500mg PO BID x5 days

Notes: Less than 5 days is not adequate when treating with a beta-lactam. Avoid amoxicillin or ampicillin due to increasing resistance. Nitrofurantoin cannot be used for ascending UTI or pyelonephritis. Antibiotics should be tailored once culture data are available.

Alternatives:

1. Ciprofloxacin: 250mg PO BID x3 days

Note: When possible, fluoroquinolones should be reserved for more serious infections than uncomplicated cystitis, and only after sensitivities are confirmed given high rates of resistance due to overuse. The adverse effect profile that is more significant than beta-lactams (i.e. QT-prolongation).

A note about MDR cystitis: ESBL isolates are becoming increasingly common due to antibiotic overuse. Before treating, decide if this is a TRUE urinary infection (i.e. do they have symptoms?). If true, then for uncomplicated cystitis with ESBL organism, consider fosfomycin or nitrofurantoin (if sensitivity is confirmed), or Infectious Diseases consultation. Ask the lab to check sensitivities to these antibiotics, for the next time someone needs to empirically treat.