

Urinary Tract Infection (UTI)

Uncomplicated and Prevention of Post-coital – GYN 6

DEFINITION

An infection of the urethra (urethritis), bladder (cystitis), ureters, or kidneys. UTI symptoms after sexual intercourse may be caused by introducing bacteria from the urethra into the bladder. The most common bacteria that lead to infection are *E. coli*, *K. pneumoniae*, and *P. mirabilis*. Antibiotic resistance is increasing, and local susceptibilities should guide empiric treatment.

SUBJECTIVE

May include:

1. Complaints of urinary frequency, burning, nocturia, dysuria or urgency
2. Hematuria
3. Suprapubic pain or lower abdominal pain
4. Sexual history
5. Stress/urge incontinence
6. Malodorous and/or cloudy urine
7. Diaphragm and/or spermicide use
8. Vaginal or penile mucopurulent discharge or other abnormal symptoms
9. Complaints of recurrent UTIs after sexual intercourse (at least 2-4 UTIs in one year)
10. Medical hx for risk factors including, but not limited to, vaginal atrophy, diabetes, congenital anatomic abnormalities, uterine prolapse, obesity, immunosuppression and sickle cell disease or trait

Should exclude:

1. Severe flank pain
2. Nausea/vomiting
3. Chills

OBJECTIVE

May include:

1. No remarkable physical findings
2. Suprapubic tenderness on abdominal exam
3. Urethral and/or bladder tenderness
4. Inflammation of urethral meatus
5. Pelvic exam as indicated

Should exclude:

1. CVA tenderness
2. Temperature > 100.4° F

LABORATORY

May include:

1. Clean catch urine dipstick which may include:
 - a. Positive blood
 - b. Positive nitrates
 - c. Positive bacteria
 - d. Positive Leukocyte
2. Clean catch urine microscopy:
 - a. Greater than or equal to 5-10 WBCs/high power field (HPF)
 - b. Positive red blood cells > 5 RBCs/high power field (HPF)STD screening, as appropriate

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- c. Negative pregnancy test in non-contracepting women
3. Vaginitis/cervicitis screening, as appropriate
4. Urine C&S report positive for >100,000 organisms of the same species for clean catch specimen

ASSESSMENT

Urinary tract infection or post-coital cystitis

PLAN

Treatment for Uncomplicated Cystitis in Nonpregnant Clients

First-Line Therapy

1. Trimethoprim/sulfamethoxazole (Bactrim DS) 160mg/800mg tablet PO BID for 3 days **OR**
2. Nitrofurantoin monohydrate/macrocrystals (Macrobid) 100 mg PO BID for 5-7 days **OR**
3. Nitrofurantoin macrocrystals (Macrochantin) 50-100 mg PO QID for 7 days **OR**
4. Fosfomycin (Monurol) 3 g PO as a single dose with 3-4 oz of water

Second-Line Therapy

1. Ciprofloxacin (Cipro) 250 mg PO BID for 3 days **OR**
2. Ciprofloxacin extended release (Cipro XR) 500 mg PO daily for 3 days **OR**
3. Levofloxacin (Levaquin) 250 mg PO q24h for 3 days **OR**
4. Ofloxacin 200 mg PO q12h for 3 days

Alternative Therapy

1. Amoxicillin-clavulanate (Augmentin) 500mg/125mg PO BID for 3-7 days **OR**
2. Amoxicillin-clavulanate (Augmentin) 250mg/125mg PO TID for 3-7 days **OR**
3. Cefdinir 300 mg PO BID for 7 days **OR**
4. Cefaclor 500 mg PO TID for 7 days **OR**
5. Cefpodoxime 100 mg PO BID for 7 days **OR**
6. Cefuroxime 250 mg PO BID for 7-10 days

Postcoital Prophylaxis

Women with recurrent UTIs, that are associated with intercourse, may be considered for postcoital prophylaxis.

1. Nitrofurantoin 50 mg PO once after intercourse **OR**
2. Nitrofurantoin 100 mg PO once after intercourse **OR**
3. trimethoprim-sulfamethoxazole 40/200 mg PO once after intercourse **OR**
4. trimethoprim-sulfamethoxazole 80/400 mg PO once after intercourse **OR**
5. cephalexin 500 mg PO once after intercourse

Treatment for Pregnant Women with Asymptomatic Bacteriuria or UTI

1. Nitrofurantoin monohydrate/macrocrystals 100 mg PO BID for 5-7 days **OR**
2. Amoxicillin 875 mg PO BID for 5-7 days **OR**
3. Amoxicillin-clavulanate 500/125 mg PO TID for 5-7 days **OR**
4. Cephalexin 500 mg PO QID for 5-7 days **OR**
5. Fosfomycin 3 g PO in a single dose with 3-4 oz water

Adjunctive Therapy Options

1. Phenazopyridine 100-200 mg PO TID PRN dysuria (do not take for more than 2 consecutive days if using with an antibiotic)

Common Over the Counter options include:

- a) AZO
- b) Uristat

CLIENT EDUCATION

1. Provide client education handout(s)
2. Review symptoms, complications, and danger signs

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3. Emphasize the importance of good perineal hygiene
4. Avoid intercourse until the infection resolves. Intercourse during infection may be painful and irritate healing tissues
5. Recommend frequent urination. Urination before and after intercourse
6. Review safer sex education as appropriate
7. Recommend client RTC if symptoms are not relieved by medication; seek medical care if symptoms worsen on medication
8. Intravaginal estrogen in individuals with atrophy of genitalia; refer as needed for management of postmenopausal status-related symptoms
9. Spermicide-containing contraceptives, particularly diaphragm, increase the risk of UTIs
10. Phenazopyridine may change your body fluids, including tears and urine orange, stain clothing and contact lenses
11. Stay well hydrated

CONSULT / REFER TO PHYSICIAN

1. Pregnancy
2. Exhibits signs and symptoms of upper UTI (fever, flank pain, malaise, nausea, vomiting and chills) or suspected renal calculus, urinary tract obstruction, or urinary tract malignancy
3. History of pyelonephritis, renal or bladder stones, recurrent UTI (3 infections/year)
4. Symptoms that persist post-treatment
5. Symptoms present with negative urine and negative STI test results

REFERENCES

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