

## Purpose Statement

The purpose of the dysuria toolkit is to assist with the early detection and treatment of suspected urinary tract infections in uncomplicated, low-risk patients. Identifying these suspected UTIs and offering empiric treatment will drastically reduce our ambulatory clinics' burden and capacity needs. This will further streamline the available resources and improve patient satisfaction and experience.

This toolkit adopts the best practices described by the American Academy of Family Physicians. The toolkit represents the best available information and will be updated to reflect new findings if needed.

The goals of the dysuria toolkit are as follows:

- Early identification of uncomplicated UTIs
- Provide empiric treatment while utilizing less valuable resources
- Optimizing tools and processes within our healthcare system (MyChart, e-visits, etc.)

This toolkit should facilitate conversations with patients and families to make optimal care decisions concerning available resources, exceptional circumstances, preferences, and needs of each patient. This toolkit is intended to supplement sound clinical judgment.

① Acute dysuria **or** ② Urinary urgency **or** ③ Urinary frequency

**AND**

④ In women, no vaginal discharge or irritation complaints

**AND**

⑤ Free of complicated UTI risk factors listed below

**THEN**

⑥ Consider empiric treatment without urine testing

# Uncomplicated Dysuria Toolkit

## Adult Care Guideline

Approved:

### Risk factors for complicated UTI:

- Urinary tract abnormality (ie. Neurogenic bladder; urologic stents)
- Nephrolithiasis
- Diabetes mellitus
- Immunosuppression
- Pregnancy
- Urinary catheter
- Recent urologic procedure/instrumentation

### Patient signs of possible UTI include:

- Burning sensation or discomfort when urinating
- Feeling that you need to urinate more often than usual
- Feeling the urge to urinate but no being able to
- Leaking a little urine
- Cloudy, dark, smelly or bloody urine

### Treatment Options:

- 1<sup>st</sup> line - Nitrofurantoin monohydrate/macrocrystals (Macrobid) – 100 mg oral twice daily for five days
- 2<sup>nd</sup> line - Trimethoprim-sulfamethoxazole –160/800 mg oral twice daily for three days
- 3<sup>rd</sup> line - Fosfomycin trometamol – 3 g in a single dose

Note: Second-line therapy includes fluoroquinolones such as ofloxacin, ciprofloxacin, and levofloxacin in 3-day regimens. However, these agents should be reserved for important uses other than acute cystitis due to their propensity for collateral damage and the risk of promoting antibiotic resistance. Third-line therapy includes  $\beta$ -lactam agents such as amoxicillin-clavulanate, cefdinir, cefaclor, and cefpodoxime-proxetil in 3–7-day regimens. These agents are appropriate choices for therapy when other recommended agents cannot be used. However,  $\beta$ -lactams generally have inferior efficacy and more adverse effects compared to other UTI antimicrobials, and should be used with caution for uncomplicated cystitis.

If desired, a urine specimen may be ordered without requiring an office visit. The antibiotic can be ordered along with the urinalysis and culture, and the patient can provide the sample prior to beginning therapy.

# Uncomplicated Dysuria Toolkit

## Adult Care Guideline

Approved:

### Resources:

<https://www.ccjm.org/page/acp-2023/uti-treatment>

<https://www.dynamedex.com/evaluation/clinical-prediction-of-urinary-tract-infection-in-adults>

<https://www.aafp.org/pubs/afp/issues/2015/1101/p778.html>

[https://www.uptodate.com/contents/acute-simple-cystitis-in-females?search=acute%20uncomplicated%20cystitis&source=search\\_result&selectedTitle=1~150&usage\\_type=default&display\\_rank=1#H2761251353](https://www.uptodate.com/contents/acute-simple-cystitis-in-females?search=acute%20uncomplicated%20cystitis&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H2761251353)

<https://www.aafp.org/pubs/afp/issues/2005/0801/p451.html>

### References:

[International Clinical Practice Guidelines for the Treatment of Acute Uncomplicated Cystitis and Pyelonephritis in Women: A 2010 Update by the Infectious Diseases Society of America and the European Society for Microbiology and Infectious Diseases.](#)

Gupta K, Hooton TM, Naber KG, et al. Clinical Infectious Diseases : An Official Publication of the Infectious Diseases Society of America. 2011;52(5):e103-20. doi:10.1093/cid/ciq257.

[Diagnosis and Management of Urinary Tract Infections in the Outpatient Setting: A Review.](#)

Grigoryan L, Trautner BW, Gupta K. Jama. 2014 Oct 22-29;312(16):1677-84. doi:10.1001/jama.2014.12842.

[Recurrent Uncomplicated Urinary Tract Infections in Women: AUA/CUA/SUFU Guideline.](#)

Anger J, Lee U, Ackerman AL, et al. The Journal of Urology. 2019;202(2):282-289. doi:10.1097/JU.000000000000296.

[Clinical Practice Guidelines for the Antibiotic Treatment of Community-Acquired Urinary Tract Infections.](#)

Kang CI, Kim J, Park DW, et al. Infection & Chemotherapy. 2018;50(1):67-100. doi:10.3947/ic.2018.50.1.67.