Yukon-Kuskokwim HEALTH CORPORATION

Clinical Guideline

UTI (Adults)

Patient presents with symptoms of cystitis: Dysuria, urinary urgency/ frequency, suprapubic abdominal pain

- Obtain UA.
- Obtain GC/CT and trichomonas if genital pruritus/discharge.

Notes

- Incidental positive urine cultures in asymptomatic patients are generally not treated (UNLESS pregnant).
- Patients with indwelling urinary catheters will have chronic colonization and abnormal UA. Treatment should be reserved for febrile illness or other clear indication of new acute infection.

UA consistent with UTI?

< 5 squamous epithelial cells/HPF
> 5 WBC/HPF
AND one of the following:
(+) leukocyte esterase
(+) nitrite (indicates significant bacteriuria; sensitive but not specific)
(+) bacteria

No → • Pursue alternate diagnosis. • Consider urine culture.

Yes

Fever, chills, flank pain, CVA tenderness, ill appearance, hemodynamic instability, WBC casts in UA?

Yes → **Pyelonephritis**

- Labs, fluids, antiemetics, analgesics as appropriate.
- Consider imaging if critically ill or concern for obstruction.

Able to be treated outpatient? (taking PO, not septic, not pregnant)

Yes → In ED:
Ceftriaxone 1 gram IV (preferred)
OR
Levofloxacin 750 mg IV

Discharge medication:
Cephalexin 1 gram PO twice daily x10-14 days
OR
Levofloxacin 750 mg PO daily x5 days

No

- Admit to inpatient.

- Empiric treatment
Ceftriaxone 1 gram IV Q24h (preferred)
OR
Levofloxacin 750 mg IV Q24h
OR
Ciprofloxacin 400 mg IV Q12h

- If MDRO risk without Hx ESBL
Piperacillin/Tazobactam 3.375 grams IV Q6h
OR
Cefepime 1 gram IV Q6h

- If Hx ESBL
Meropenem 1 gram IV Q8h

Risk Factors for Multi-Drug Resistant Organism (MDRO)

- Prior MDRO
- UTI developed during inpatient hospitalization
- Use of TMP-SMX, fluoroquinolone, or 3rd or 4th generation cephalosporin in past 3 months

Improving?

Yes →
- Narrow based on sensitivities.
- Discharge on PO antibiotics.

No →
- Obtain imaging to rule-out obstruction.
- Broaden to meropenem to cover ESBL.

No → **Functional urinary tract abnormalities, BPH, calculi, obstruction, chronic catheterization?**

No → **Simple UTI/Cystitis**

Nitrofurantoin 100 mg PO twice daily x5 days (first line if <65 years and no known Hx ESBL)
OR
Cephalexin 500 mg PO twice daily x5-7 days (first line if > 65 years)

If allergic to both:
Ciprofloxacin 250 mg PO twice daily x3 days

Yes → **Complicated UTI**

Able to be treated outpatient? (taking PO, not septic, not pregnant)

Yes →
- Empiric antibiotics based on prior urine cultures.
- Definitive treatment based on culture.
- If no prior urine culture, treat as pyelonephritis.
- Antibiotic duration 3-5 days after clinical improvement.

No →
- Admit to inpatient.
- Manage as pyelonephritis.

This guideline is designed for the general use of most patients but may need to be adapted to meet the special needs of a specific patient as determined by the medical practitioner.
Approved by Clinical Guideline Committee 10/21/22.
Click here to see the supplemental resources for this guideline.
If comments about this guideline, please contact Kaia_Pearson@ykhc.org.