

Clinical Pathways Program

Guideline: Urinary Tract Infection, Urine Specimen Collection to Diagnose, Inpatient

Updated: October 6, 2020

Clinical algorithm:

Urine Specimen Collection to Diagnose a UTI

Is the patient at high risk?

- Neutropenic (ANC <500)
- Pregnant female -
- Pediatric age <24 months
- Upcoming/recent urologic procedure <6 months
- Renal transplant <6 months from surgery

If yes, consider urinalysis and urine culture if UTI suspected.

Patient at normal risk.

No indwelling urinary catheter in place

Does the patient have symptoms?

- New or increased burning pain on urination*
- New or increased urinary urgency/incontinence*
- New flank or suprapubic pain, or tenderness
- Gross hematuria

OR

Fever or rigors or clinical deterioration AND unable to localize symptoms. <u>Delirium</u>, <u>weakness</u>, <u>confusion without signs of systemic infection are rarely related to UTI and should not prompt UA alone</u>.

Temporary indwelling urinary catheter in place or removed day prior*

Does the patient have symptoms?

Fever (>38.0°C) **AND** at least 1 of the following:

- Suprapubic tenderness
- Costovertebral pain or tenderness

OR

Rigors or clinical deterioration AND unable to localize symptoms. <u>Delirium, weakness,</u> <u>confusion without signs of</u> <u>systemic infection are rarely</u> <u>related to UTI and should not</u> <u>prompt UA alone.</u> **Chronic** Indwelling urinary catheter in place

Does the patient have symptoms?

Fever (>38.0°C) **AND** at least 1 of the following:

- Suprapubic tenderness
- Costovertebral pain or tenderness

OR

Rigors or clinical deterioration AND unable to localize symptoms. <u>Delirium, weakness,</u> <u>confusion without signs of</u> <u>systemic infection are rarely</u> <u>related to UTI and should not</u> <u>prompt UA alone.</u>

If yes, order a UA

If no, a UA is not indicated

If UA negative, stop and consider other sources of potential infection.

If UA positive, treat as appropriate and consider ordering urine culture only if needed for specificity.

*NOTE: Once an IUC has been removed, urinary urgency, frequency or dysuria can often be explained by irritation for any patient or prostate enlargement in elderly men, not infection. Cultures may reveal colonization and lead to inappropriate antibiotics.

Clinical guideline summary

CLINICAL PATHWAY NAME: Urine Specimen Collection to Diagnose a UTI

PATIENT POPULATION AND DIAGNOSIS: ED and Inpatient

APPLICABLE TO: All Spectrum Health Sites

BRIEF DESCRIPTION: Guidance for when to order a urinalysis to determine if a patient has a

UTI.

OVERSIGHT TEAM LEADER(S): Dr. Russ Lampen

OWNING EXPERT IMPROVEMENT TEAM (EIT): CAUTI Prevention

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Acute Health

OTHER TEAM(S) IMPACTED (FOR EXAMPLE: CPCs, ANESTHESIA, NURSING,

RADIOLOGY): Nursing

IMPLEMENTATION DATE: 10/13/2020

LAST REVISED: 10.6.2020

FOR MORE INFORMATION, CONTACT: Dr. Nick Kuhl, Dr. Cheryl Peavler, Dr. Russ Lampen

or Cheryl Houseman

References:

O'Grady NP., et al., "Guidelines for Evaluation of New Fever in Critically III Adult Patients: 2008 Update from the American College of Critical Care Medicine and the Infectious Diseases Society of America". Critical Care Medicine 2008: 36:4: 1330-1349.

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