

VCH Management of Urinary Tract Infections (UTI) in Non-pregnant Adults

KEY POINTS:

1. Malodorous/cloudy urine alone is **NOT** a sign/symptom of UTI and is **NOT** an indication to obtain urine cultures ⁽¹⁾
2. Changes in cognitive function and activities of daily living **REQUIRE** clinical assessment; never assume these are due to UTI
3. Urine should **ALWAYS** be collected midstream, by in/out catheterization, or through a new catheter (unless contraindicated) ⁽²⁾
4. Positive urine cultures in asymptomatic patients should **NOT** be treated except in pregnancy or prior to urologic/gynecologic surgery

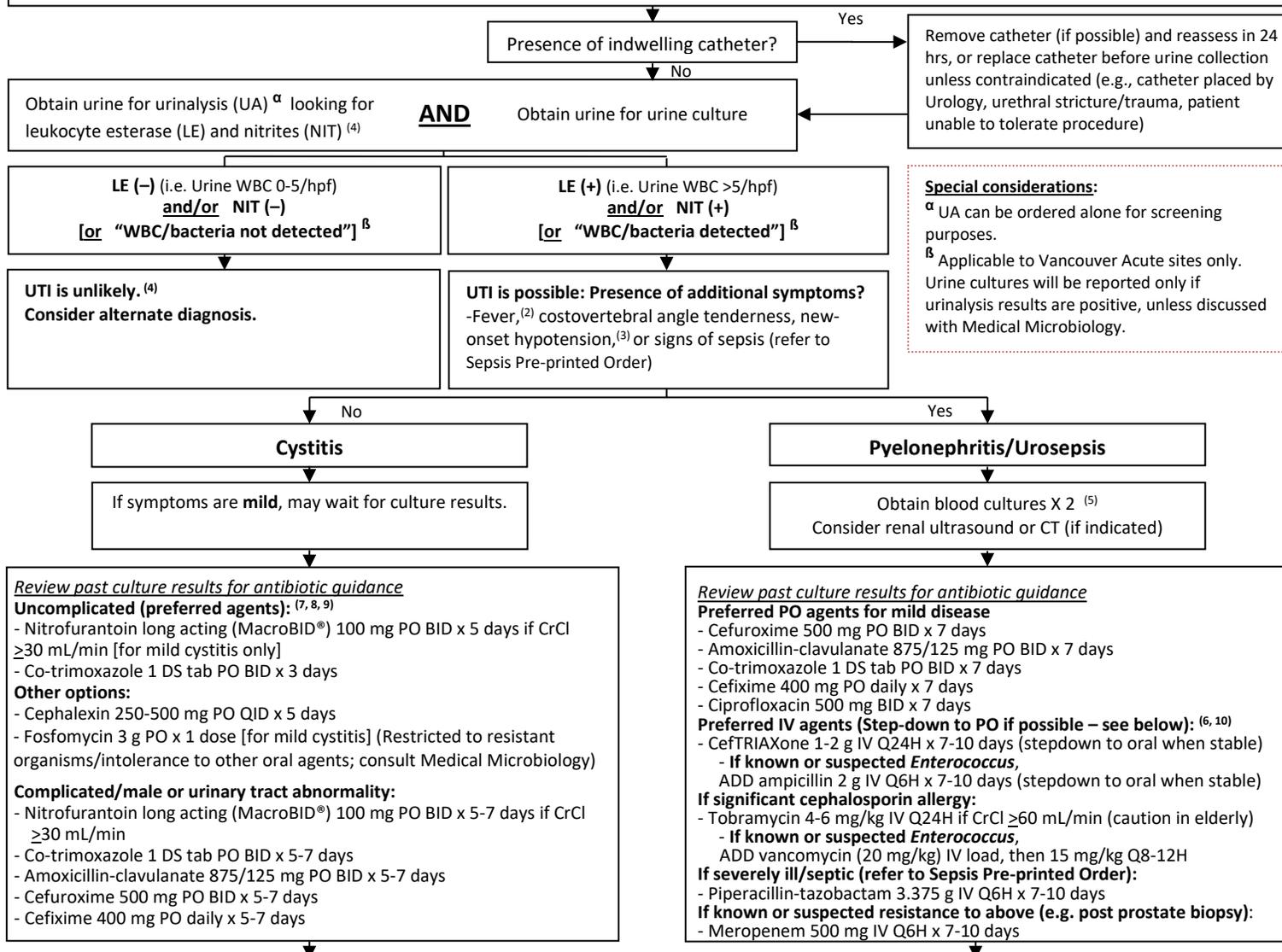
Signs and Symptoms of Suspected UTI ⁽³⁾

-One of the following in febrile patients (oral temperature >37.8 °C [or 1°C above baseline in Spinal Cord Injury]) or two of the following in afebrile patients:

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| i. Acute dysuria | vi. Suprapubic pain |
| ii. New or marked increase in incontinence | vii. Gross hematuria |
| iii. New or marked increase in urgency | viii. Swelling, or tenderness of the testes, epididymis, or prostate |
| iv. New or marked increase in frequency | ix. New-onset of acute costovertebral angle pain or tenderness |
| v. New or marked increase in urinary retention | x. Episode of autonomic dysreflexia (with no other apparent cause) |

NOTE: *Only after clinical assessment and ruling-out of other possible causes should changes in mental status and functional decline, and sudden fever, rigors or new-onset hypotension suggest UTI in patients; use clinical judgment.* ⁽³⁾

For Geriatric and Spinal Cord Injury (including conus/cauda equina): *UTI may present atypically; use clinical assessment to guide decision for urine culture & urinalysis.*



Review cultures at 48 hours for directed therapy

Direct and Tailor Therapy:

- Select antibiotic with narrowest spectrum based on culture results.
- Step-down to PO agent when appropriate.
- Assess clinical status; lack of improvement should prompt investigations for alternate cause.

IV to PO Step-down Criteria:

- Temperature <38°C X 24 hrs;
- WBC <11 or decreasing trend;
- Clinical improvement on IV therapy;
- Ability to absorb through GI tract.

Duration of Therapy:

- Cystitis:**
- 3-5 days (healthy, pre-menopausal females);
 - 5 to 7 days (males, elderly females, or recurrence).
- Pyelonephritis:**
- 7 to 10 days (if uncomplicated);
 - 14 days (if urologic structural abnormalities).

Quantitative definitions of bacteriuria:

In an **appropriately collected** single urine specimen,

-Isolation of **one (predominant) bacterial strain** with a count of **≥ 100 million CFU/L** ⁽¹¹⁾

-[If more than one bacterial strain isolated or if bacteria count is < 100 million CFU/L, re-culture urine if symptomatic]

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