

ABCs for Diagnosing Urinary Tract Infection in Long Term Care

Resident Name: _____ Date/Time: _____

Nurse: _____ MD/NP/PA: _____

Diagnosis of Urinary Tract Infection (UTI) in long term care resident requires clinical signs and symptoms of UTI and a positive culture.

Assessment: Clinical Signs and Symptoms of UTI¹

CHECK HERE IF CRITERIA ARE MET FOR SIGNS OR SYMPTOMS

Resident without indwelling catheter*

- Acute dysuria alone OR
- Fever + at least one of the symptoms below (new or increased) OR
- If no fever, at least two of the symptoms below (new or increased)
 - Urgency
 - Frequency
 - Suprapubic pain
 - Gross hematuria
 - Costovertebral angle (CVA) pain or tenderness
 - Urinary incontinence

*Mental status changes alone are not specific enough to identify symptomatic urinary tract infection. See reverse side for alternative causes.

OR

Resident with indwelling catheter

- At least one of the symptoms below (new or increased)
 - Fever
 - Costovertebral angle (CVA) pain or tenderness
 - Rigors (shaking chills)
 - Delirium
 - Flank pain (back, side pain)
 - Pelvic discomfort
 - Acute hematuria
 - Malaise or lethargy with no other cause

Blood Pressure _____ Pulse _____ Temperature _____ Respiratory Rate _____

Fever (oral > 100°F or any site > 2°F above baseline or repeated oral > 99°F / rectal >99.5°F)

Bacteria (Order urinalysis and culture & sensitivity if above criteria are met)

Collect clean voided specimen if possible; in and out catheter if necessary. For residents with chronic indwelling Foley catheter, change catheter; send urine obtained from new catheter.

Consider CBC, BMP if clinically indicated (e.g., lethargy, fever). The presence of an elevated WBC count suggests infection, with or without a fever.

Urinalysis

- Nitrite** Positive Negative
- Leukocyte esterase** Positive Negative
- Pyuria** > 10 WBC urinalysis

Culture and sensitivity

- Positive urine culture:
 - Clean catch specimen: $\geq 10^5$ cfu/mL with ≤ 2 organisms
 - Catheterized specimen (straight cath or newly placed indwelling cath): $\geq 10^3$ cfu/mL with ≥ 1 organism
- Negative urine culture

Care Plan

Criteria met for UTI symptoms **AND** positive urine culture



- Review for treatment with antibiotics
- Monitor vital signs
- Monitor fluid intake and increase if indicated

Criteria not met for UTI symptoms (with or without a positive urine culture)



- Review for alternate diagnosis
- Monitor vital signs and symptoms
- Monitor fluid intake and increase if indicated
- Re-evaluate if above criteria for symptomatic UTI emerge

AT ANY POINT, re-evaluate and review with MD/NP/PA, if symptoms progress or if the resident has any of the following: Fever > 100.5° F, heart rate > 100 or < 50, RR > 28/min or < 10/min, BP < 90 or > 200 systolic, oxygen saturation < 90%, finger stick glucose < 70 or > 300, unable to eat or drink.

Prior to treatment consider review:

- | | | |
|---|-----------------------------|------------------------------|
| Advance directives for limiting treatment (especially antibiotics): | <input type="checkbox"/> NO | <input type="checkbox"/> YES |
| Medication Allergies: | <input type="checkbox"/> NO | <input type="checkbox"/> YES |
| The resident is on warfarin (Coumadin) | <input type="checkbox"/> NO | <input type="checkbox"/> YES |

Possible causes for mental status changes include:

- Constipation
- Pain
- Dehydration
- Medication or dose change
- Hypoxia
- Infections such as pneumonia
- Hypo/hyperglycemia
- Urinary retention
- Environmental triggers

NOTES
