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 UTI

☐ 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

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

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

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.

<table>
<thead>
<tr>
<th>Urinalysis</th>
<th>Culture and sensitivity</th>
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</thead>
<tbody>
<tr>
<td>Nitrite</td>
<td>☐ Positive ☐ Negative</td>
</tr>
<tr>
<td>Leukocyte esterase</td>
<td>☐ Positive ☐ Negative</td>
</tr>
<tr>
<td>Pyuria</td>
<td>☐ &gt; 10 WBC urinalysis</td>
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<tr>
<td></td>
<td>☐ Positive urine culture:</td>
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<tr>
<td></td>
<td>Clean catch specimen: $\geq 10^5$ cfu/mL with $\leq 2$ organisms</td>
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<tr>
<td></td>
<td>Catheterized specimen (straight cath or newly placed indwelling cath): $\geq 10^3$ cfu/mL with $\geq 1$ organism</td>
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<tr>
<td></td>
<td>☐ Negative urine culture</td>
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</tbody>
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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): □ NO □ YES
- Medication Allergies: □ NO □ YES
- The resident is on warfarin (Coumadin) □ NO □ 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


1 CID 2010;50:625-663 (IDSA guidelines CA-UTI); ID 2009;48:149-171 (IDSA guidelines LTCF); ICHE 2001;22:120-124 (Loeb criteria) CID 2005;40:643-54 (IDSA guidelines ASB); Interact 3.0 Care Path Symptoms of UTI