Diagnosis of UTIs in (Noncatheterized) Nursing Home Residents

CRITERIA #1

At least 1 of the following signs/ symptoms:

A. Acute dysuria or pain, swelling or tenderness of testes, epididymis or prostate

B. Fever (>100° or >2° above baseline) or leukocytosis (>14,000) or left shift (>6% Bands) + ≥1 of these localizing criteria:

- **i. Acute CVA Pain or Tenderness**
- **ii. Suprapubic Pain**
- **iii. Gross Hematuria**
- **iv. New or marked increase in incontinence**
- **v. New or marked increase in urgency**
- **vi. New or marked increase in frequency**

C. If no fever or leucocytosis, 2 or more from items ii – vi, above, are documented

If Criteria #1 is met and documented, check a UA. Encourage plenty of extra fluids.

If the above is documented and there is a high degree of suspicion that they have a UTI, empirically start an antibiotic while waiting for the UA.

CRITERIA #2

One of the following 2 microbiologic subcriteria:

A. >100,000 cfu/ml of no more than 2 species of microorganisms in a voided urine sample

B. >100 cfu/ml of any number of organisms in a specimen collected via catheter

If the UA / Culture is negative, DC THE ANTIBIOTIC

USEFUL INFORMATION ABOUT UTIs:

- Bacteria in urine *without* meeting these criteria is **asymptomatic bacteriuria** and should **not** be treated
- Behavior change, smelly or cloudy urine, falls or acting different are *not* part of the criteria!
- Increasing fluids is a good idea, clearing the bladder of stagnant, microorganism-rich urine
- Consider double-voiding or topical estrogens for elderly women
- Overuse of antibiotics leads to resistant organisms, unnecessary and potentially dangerous side effects, added cost, adverse drug-drug interactions and increasing prevalence of C Diff Enteritis (Diarrhea)
- Guidance for treatment of asymptomatic bacteriuria can be found in the IDSA Guidelines at https://www.idsociety.org/practice-guideline/asymptomatic-bacteriuria/.

Gregory Gahm, MD; 2022

Diagnosis of UTIs in Catheterized Nursing Home Patients

CRITERIA #1

At least 1 of the following must be met:

A. **Fever (>100° or >2° above baseline or repeated oral temps >99° or rectal temps >99.5°), rigors or new–onset significant hypotension with no other obvious site of infection**
B. **Leukocytosis (>14,000) or a left shift with > 6% bands or > 1500 bands / mm^3 *plus* either an acute change in mental status or acute functional decline without an alternate diagnosis**
C. **Purulent discharge from around the catheter or acute pain, swelling or tenderness of the testes, epididymis or prostate**
D. **New-onset suprapubic pain or costovertebral angle pain or tenderness**

If Criteria #1 is met and documented, check a UA. Encourage plenty of extra fluids.

If the above is documented and there is a high degree of suspicion that they have a UTI, empirically start an antibiotic while waiting for the UA.

CRITERIA #2

Urinary catheter specimen with >100,000 cfu/ml of any organism

If the UA / Culture is negative, discontinue the antibiotic

USEFUL INFORMATION ABOUT UTIs:

- Bacteria in urine *without* meeting these criteria is **asymptomatic bacteriuria** and should **not** be treated
- Behavior change, smelly or cloudy urine, falls or acting different are *not* part of the criteria!
- Increasing fluids is a good idea, clearing the bladder of stagnant, microorganism-rich urine
- Overuse of antibiotics leads to resistant organisms, unnecessary and potentially dangerous side effects, added cost, adverse drug-drug interactions and increasing prevalence of C Diff Enteritis (Diarrhea)
- Guidance for treatment of asymptomatic and symptomatic bacteriuria can be found in the IDSA Guidelines at www.idsociety.org/PracticeGuidelines.

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Diagnosis of Pneumonia in Nursing Home Residents

All 3 Criteria must be present to diagnose Pneumonia:

1. **CXR** demonstrating pneumonia or new infiltrate;
2. At least 1 of the following documented:
   - New or increased cough
   - New or increased sputum production
   - O_2 Sat <94% (Room Air) or Reduced >3% from baseline
   - New or changed lung exam abnormalities
   - Pleuritic Chest Pain
   - Respiratory Rate >25 / minute
3. At least one of the Constitutional Criteria

Constitutional Criteria for Residents in LTCFs

1. **Fever**
   - A. Oral >100° or
   - B. Repeated Oral Temps >99° or Rectal Temps >99.5° or
   - C. A temp >2° above an established baseline for the patient
2. **Leukocytosis**
   - A. WBC >14,000 or
   - B. Left Shift with >6% Bands or >1500 Bands / mm^3
3. **Acute Change in Mental Status from Baseline** (*requires **all 4** criteria below*)
   - A. Acute Onset;
   - B. Fluctuating Course;
   - C. Inattention; and
   - D. Disorganized Thinking or Altered Level of Consciousness
4. **Acute Functional Decline**: A New 3-point Increase in Total ADL score from baseline based on 7 ADL Items rated 0 (independent) to 4 (Total Dependence)
   - A. Bed Mobility
   - B. Transfer
   - C. Locomotion within LTCF
   - E. Toilet Use
   - F. Personal Hygiene
   - G. Eating

NOTE: *Underlying conditions (e.g., CHF, ILD/IPF) that could mimic LRTIs should be documented and explicitly excluded by a review of signs and symptoms by the provider*

Gregory Gahm, MD 3/2021

Diagnosis of Lower Respiratory Tract Infection in LTCFs

All 3 Criteria must be present to diagnose Pneumonia:

1. CXR not done or negative for pneumonia or new infiltrate;
2. At least 2 of the following documented:
   - New or increased cough
   - New or increased sputum production
   - O_2 Sat <94% (Room Air) or Reduced >3% from baseline
   - New or changed lung exam abnormalities
   - Pleuritic Chest Pain
   - Respiratory Rate >25 / minute
3. At least one of the Constitutional Criteria

Constitutional Criteria for Residents in LTCFs

1. **Fever**
   - A. Oral >100° or
   - B. Repeated Oral Temps >99° or Rectal Temps >99.5° or
   - C. A temp >2° above an established baseline for the patient
2. **Leukocytosis**
   - A. WBC >14,000 or
   - B. Left Shift with >6% Bands or >1500 Bands / mm^3
3. **Acute Change in Mental Status from Baseline** (*requires **all 4** criteria below*)
   - A. Acute Onset;
   - B. Fluctuating Course;
   - C. Inattention; and
   - D. Disorganized Thinking or Altered Level of Consciousness
4. **Acute Functional Decline**: A New 3-point Increase in Total ADL score from baseline based on 7 ADL Items rated 0 (independent) to 4 (Total Dependence)
   - A. Bed Mobility
   - B. Transfer
   - C. Locomotion within LTCF
   - E. Toilet Use
   - F. Personal Hygiene
   - G. Eating

NOTE: *Underlying conditions (e.g., CHF, ILD/IPF) that could mimic LRTIs should be documented and explicitly excluded by a review of signs and symptoms by the provider*

URIs should NOT be treated with antibiotics without a + Rapid Strep

Gregory Gahm, MD 3/2021

Diagnosis of Cellulitis, Skin or Wound Infection in LTCFs

At Least One (1) of these Two (2) Criteria must be present:

1. **Pus present at a wound, skin or soft tissue site; OR**
2. **Documented new or increasing presence of ≥ 4 of the following signs / symptoms at the affected site:**
   - **Heat**
   - **Redness**
   - **Swelling**
   - **Tenderness**
   - **Serous drainage**
   - **One Constitutional Criteria**
3. **At least one of the Constitutional Criteria**

Constitutional Criteria for Residents in LTCFs

1. **Fever**
   - A. Oral >100° or
   - B. Repeated Oral Temps >99° or Rectal Temps >99.5° or
   - C. A temp >2° above an established baseline for the patient
2. **Leukocytosis**
   - A. WBC >14,000 or
   - B. Left Shift with >6% Bands or >1500 Bands / mm^3
3. **Acute Change in Mental Status from Baseline** (*requires **all 4** criteria below*)
   - A. Acute Onset;
   - B. Fluctuating Course;
   - C. Inattention; and
   - D. Disorganized Thinking or Altered Level of Consciousness
4. **Acute Functional Decline: A New 3-point Increase in Total ADL score from baseline based on 7 ADL Items rated 0 (independent) to 4 (Total Dependence)**
   - A. Bed Mobility
   - B. Transfer
   - C. Locomotion within LTCF
   - E. Toilet Use
   - F. Personal Hygiene
   - G. Eating

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Diagnosis of Conjunctivitis

At Least One (1) of the following criteria:

4. **Pus in 1 or both eyes for >24 hours;**
5. **New or increased conjunctival erythema (not due to allergy or trauma);**
6. **New or increased conjunctival pain for >24 hours**

Diagnosis of Norovirus

Both of the following criteria must be met:

1. **At Least One Clinical GI Subcriteria:**
   - **Diarrhea (≥ 3 liquid or watery stools above normal within 24 hours)**
   - **Vomiting (≥ 2 episodes within 24 hours)**
2. **Stool Specimen positive for Norovirus**

   (Testing is not necessary for patients with typical symptoms in a facility in the midst of a proven Noro outbreak)

Diagnosis of Clostridium Difficile

[Note: *C Diff almost never occurs without antibiotic use in the previous 90 days*]

Both of the following criteria must be met:

1. **One Clinical GI Subcriteria:**
   - **Diarrhea (≥ 3 liquid or watery stools above normal within 24 hours)**
   - **Toxic Megacolon (Documented Radiographically)**
2. **One Diagnostic Subcriteria:**
   - **Stool Specimen positive for C Diff from a *diarrhea* sample**
   - **Pseudomembranous colitis identified during endoscopy**

["*Recurrent*" episode is one that occurs <8 weeks after a previous episode if symptoms from earlier episode had resolved. Since chronic colonization is common for up to 2 years in seniors, do not overdiagnose C Diff without applying other surveillance criteria]

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