WELCOME!
Please MUTE your phones!
EQuIP for LTC webinar will begin at 10:00 AM

Today’s topic is
“Clinical Pearls to Reduce Antibiotic Overuse”
7/26/17
Housekeeping

Please...

0 Mute your phone if you are not speaking
0 Do not put the phone line on hold
0 Use the chat box to ask questions during and after the presentation
Enrollment in EQuIP

- Formal participation encouraged (not mandatory)
- Requires signed enrollment form by facility leadership & contact info for facility attendees
- Annual facility self-assessment
- Opportunity to participate in small group collaborative and QI projects
  - Work together
  - Share outcome data
  - Community of support
- Establish ASP & be recognized on DOH Honor Roll for Stewardship

http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/HealthcareAssociatedInfections/EQuIP/LTC
Qualis Health

- A leading national population health management organization
- The Medicare Quality Innovation Network - Quality Improvement Organization (QIN-QIO) for Idaho and Washington

The QIO Program

- One of the largest federal programs dedicated to improving health quality at the local level
NHQCC

• Over 200 SNFs in Washington & Idaho
• Collaborative Modules
  • Team STEPPS
  • Antibiotic Stewardship
  • Infection Prevention
  • Antipsychotics & Mobility & Person-Centered-Care
• National Healthcare Safety Network C-Diff Reporting
Qualis Health Support for Antibiotic Stewardship in SNFs

- Aligned with Dept of Health EQuIP for LTC
- Based on CDC Core Elements / Antibiotic Stewardship for Nursing Homes Checklist
- Resources and technical assistance to address gaps identified in CDC Checklist
Qualis Health Antibiotic Stewardship Module

• Kick-off Webinar August 22nd
• “Office Hours” September – November
• In-person half-day peer-support workshops Seattle and Spokane in October
• PRN consulting on process improvement, antibiotic stewardship implementation, and NHSN C-Diff reporting
Qualis Health NHQCC
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Clinical pearls to reduce antibiotic overuse

Amit Desai, DO
Off hand, I'd say you're suffering from an arrow through your head, but just to play it safe, I'm ordering a bunch of tests.
Outline

- Talk is practical and clinically oriented.
- Focused on UTI, PNA, cellulitis.
- Highlight the importance of communication.
Revised McGeer criteria

- Standardized criteria for diagnosing infection.
- For research and accurate tracking of infections.
- Hard to use at bedside.
- Useful as part SBAR form used for communication.
Why are antibiotics overused?

- Lack of knowledge
- Cognitive errors
- Fear of repercussion
- Family pressure
- Supply sensitive care
- System factors
Diagnosing infections

- Does the patient have new symptoms?
- Are there localized signs of infection?
- How ill are they compared to baseline?
- Look for alternative causes?
- Can I wait and watch?
UTI

positive urine culture + pyuria

Symptomatic (UTI)  Asymptomatic bacteriuria

Don’t treat asymptomatic bacteriuria.
UTI

2 new symptoms: frequency, urgency, dysuria, flank pain, hematuria, suprapubic tenderness or fever.

Pyuria (>10 WBC/HPF) and positive urine culture (>10^5 CFU/ml)

Symptomatic UTI
Table 2. Prevalence of asymptomatic bacteriuria in selected populations.

<table>
<thead>
<tr>
<th>Population</th>
<th>Prevalence, %</th>
<th>Reference</th>
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</thead>
<tbody>
<tr>
<td>Healthy, premenopausal women</td>
<td>1.0–5.0</td>
<td>[31]</td>
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<tr>
<td>Pregnant women</td>
<td>1.9–9.5</td>
<td>[31]</td>
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<tr>
<td>Postmenopausal women aged 50–70 years</td>
<td>2.8–8.6</td>
<td>[31]</td>
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<tr>
<td>Diabetic patients</td>
<td></td>
<td></td>
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<tr>
<td>Women</td>
<td>9.0–27</td>
<td>[32]</td>
</tr>
<tr>
<td>Men</td>
<td>0.7–11</td>
<td>[32]</td>
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<tr>
<td>Elderly persons in the community&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Women</td>
<td>10.8–16</td>
<td>[31]</td>
</tr>
<tr>
<td>Men</td>
<td>3.6–19</td>
<td>[31]</td>
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<tr>
<td>Elderly persons in a long-term care facility</td>
<td></td>
<td></td>
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<tr>
<td>Women</td>
<td>25–50</td>
<td>[27]</td>
</tr>
<tr>
<td>Men</td>
<td>15–40</td>
<td>[27]</td>
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<tr>
<td>Patients with spinal cord injuries</td>
<td></td>
<td></td>
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<tr>
<td>Intermittent catheter use</td>
<td>23–89</td>
<td>[33]</td>
</tr>
<tr>
<td>Sphincterotomy and condom catheter in place</td>
<td>57</td>
<td>[34]</td>
</tr>
<tr>
<td>Patients undergoing hemodialysis</td>
<td>28</td>
<td>[28]</td>
</tr>
<tr>
<td>Patients with indwelling catheter use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term</td>
<td>9–23</td>
<td>[35]</td>
</tr>
<tr>
<td>Long-term</td>
<td>100</td>
<td>[22]</td>
</tr>
</tbody>
</table>

<sup>a</sup> Age, ≥70 years.
Myths of UTI

- Urinary odor should trigger UA and urine culture. **FALSE**
- Confusion and falls should trigger a UA and culture. **FALSE**
- Agitation should trigger UA and urine culture. **FALSE**
- Dipstick +ve LE and +ve nitrite means there is UTI. **FALSE**
- Pyuria and/or +ve urine culture means it is a UTI. **FALSE**
High risk medication

- Benadryl (sleep, allergy)
- Flexiril (muscle relaxant)
- Xanax (anxiety)
- Ativan (anxiety)
- Clonazepam (anxiety)
- Oxybutinin (OAB)
- Meclizine (BPV)
- Opioids (pain)
Treatment

- Treat cystitis for 3-5 days. Pyelonephritis 7-14 days.

- Don’t use fluoroquinolones for cystitis as 1st line agent.

- Antibiogram for susceptibility based treatment.
Respiratory illnesses

- Differentiate between 3 illness:
  - Pneumonia
  - Bronchitis
  - Influenza
Pneumonia
Community acquired pneumonia

Pneumonia

- C-xray shows new infiltrate
- WBC >14K, change in functional or mental status
- Fever, cough, hypoxia, tachypnea, pleuritic chest pain
Community acquired pneumonia

- Check Procalcitonin. If less than cutoff stop treatment.

- Beta-lactam + macrolide or doxycycline for 5-7 days.

- Crackles on nursing auscultation can predict pneumonia with good accuracy.
Bronchitis

Normal

Narrowed
Acute Bronchitis

Acute Bronchitis (viral)

- Chest X-Ray with NO infiltrate
- Fever, cough, hypoxia, tachypnea, pleuritic chest pain
Influenza

- Fever
- At least 3 of the following influenza-like illness subcriteria
  - Chills
  - New headache or eye pain
  - Myalgias or body aches
  - Malaise or loss of appetite
  - Sore throat
  - New or increased dry cough
Common cold (pharyngitis)

- Runny nose or sneezing
- Stuffy nose (congestion)
- Sore throat or hoarseness or difficulty in swallowing
- Dry cough
- Swollen or tender glands in the neck (cervical lymphadenopathy)
- No antibiotics for common cold
Cellulitis

- Learn to differentiate stasis dermatitis from cellulitis.

- Cellulitis:
  - Pus present at a wound, skin or soft tissue site.
  - New presence of heat, redness, swelling, tenderness and drainage often with fever and leukocytosis.
Is It Cellulitis?

- Cellulitis is rarely bilateral.

- A chronic course points to a diagnosis other than cellulitis.

- Plaques with a “bound-down” appearance or dark pigmentation point to a chronic disease rather than cellulitis.
Cellulitis

- Purulent (staph)
- Non-purulent (strep)
Cutaneous Abscess
Non Purulent Cellulitis
Stasis Dermatitis
Treatment

- Purulent cellulitis require I&D. +/- short antibiotic course targeting *MRSA*, *MSSA*.

- Non purulent cellulitis requires 5 days of antibiotic targeting *Beta hemolytic strep*.

- Raise leg for non purulent cellulitis.
Importance of communication

- Communication influences health care utilization.

- Communication impacts patient and provider satisfaction.

- Important to communicate risk and benefit of treatment.

- Communication is a learned skill.


References

Questions

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