Diagnosis

- Asymptomatic bacteriuria (ASB) is a positive urine culture from a person with NO symptoms of a urinary tract infection (UTI) such as dysuria, frequency, urgency, fever, or flank pain.
- ASB is common and often associated with pyuria (urine containing ≥10 white blood cells per high-powered field).

<table>
<thead>
<tr>
<th>Population</th>
<th>Prevalence of ASB</th>
<th>Prevalence of Pyuria in Persons With ASB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female long-term care residents</td>
<td>25–50%</td>
<td>90%</td>
</tr>
<tr>
<td>Male long-term care residents</td>
<td>15–35%</td>
<td>90%</td>
</tr>
<tr>
<td>Women &gt; 90 years old</td>
<td>22–43%</td>
<td></td>
</tr>
<tr>
<td>Women 65–90 years old</td>
<td>6–16%</td>
<td></td>
</tr>
<tr>
<td>Healthy premenopausal women</td>
<td>&lt; 5%</td>
<td>32%</td>
</tr>
<tr>
<td>Women with diabetes</td>
<td>9–27%</td>
<td>70%</td>
</tr>
<tr>
<td>Men with diabetes</td>
<td>1–11%</td>
<td></td>
</tr>
<tr>
<td>People receiving hemodialysis</td>
<td>28%</td>
<td>90%</td>
</tr>
<tr>
<td>Presence of indwelling urinary catheter</td>
<td>&gt;90%</td>
<td>50–100%</td>
</tr>
</tbody>
</table>

Treatment

- The majority of people with ASB and/or asymptomatic pyuria SHOULD NOT be treated with antibiotics.
- Treatment of ASB does not prevent future UTIs.
- Treatment of ASB is associated with adverse events related to antibiotic use and can increase the likelihood of developing future UTIs that are antibiotic resistant.
- Exception relevant to long-term care
  - Individuals with ASB about to undergo urologic procedures in which mucosal bleeding is expected (not including urinary catheter placement)
    - A short treatment course (<3 days) may prevent urosepsis.

Frequently Asked Questions

- How can I prevent unnecessary treatment of asymptomatic bacteriuria?
  - Do not order urine cultures unless a resident has signs and symptoms of a UTI.
    - This includes residents undergoing preoperative evaluations or residents with urinary catheters.
- What should I do for residents with dark or foul-smelling urine?
  - Dark, foul-smelling, or cloudy urine most likely indicates dehydration; therefore, encourage hydration.
- What should I do for residents with a change in mental status?
  - There are many reasons for a change in mental status that are not related to UTIs. Assess for dehydration, pain, change in medications, poor sleep, constipation, and mood disorders.
References


AHRQ Pub. No. 17(21)-0029
June 2021