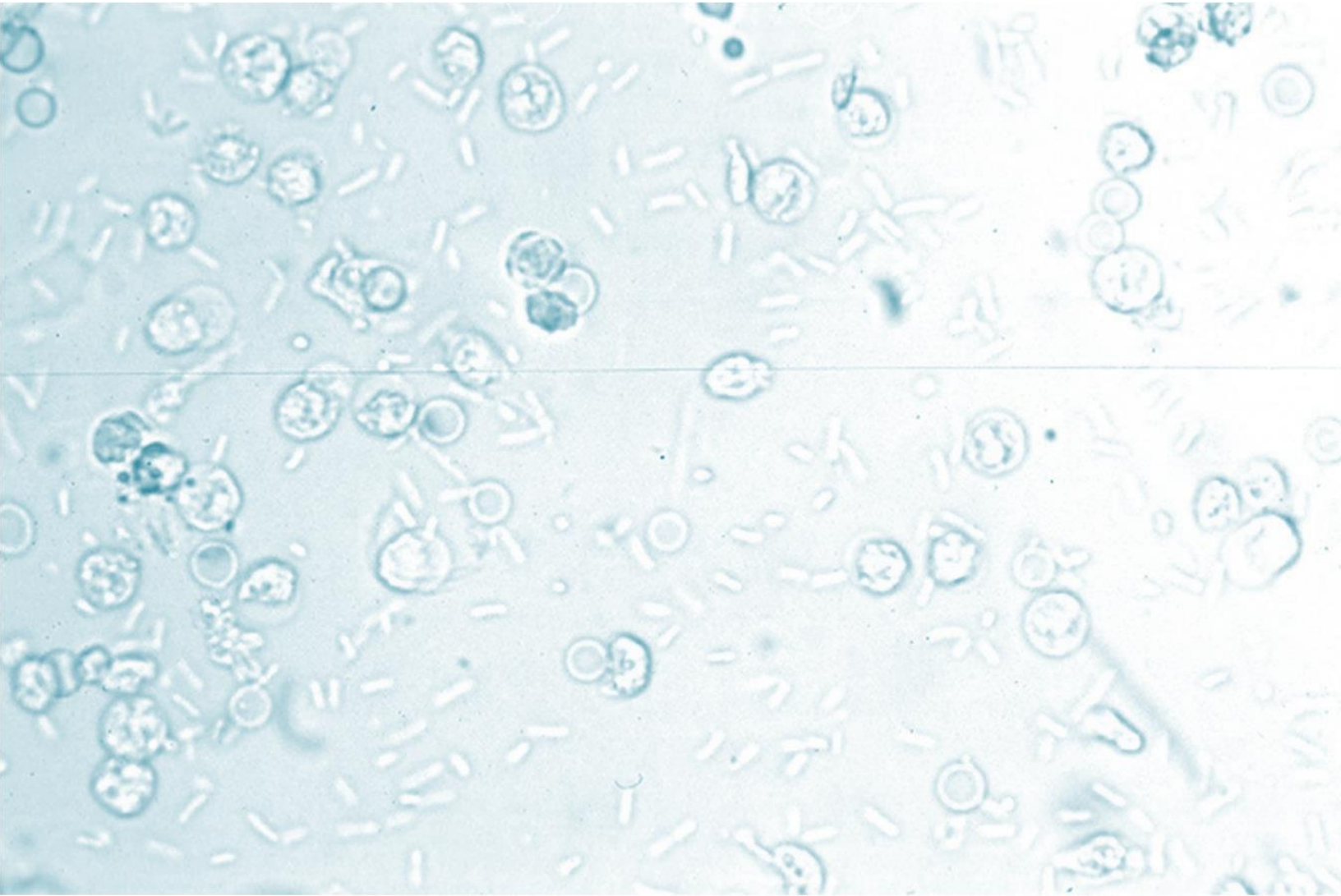


REDUCING OVERTREATMENT OF ASYMPTOMATIC BACTERIURIA:

Increasing Facility Efficiency, Lowering Potential Side Effects



Overtreatment of asymptomatic bacteriuria leads to:

- Antibiotic resistance
- Adverse events in patients



Implement specific clinical criteria for nurses to check before sending urine cultures.

WHY? Often, routine cultures show asymptomatic bacteriuria (ASB) that does not correspond to infection.



SEND a Urine Culture When Following Symptoms Are Noted:

- *Fever or rigors*
- *Urinary urgency or frequency*
- *Dysuria*
- *Hematuria*
- *New onset of urinary incontinence*
- *Acute urinary retention*
- *Flank pain*
- *Significant change in mental status (with no other explanation)*



Do NOT Send a Routine Urine Specimen for Symptoms Such As:

- *Foul-smelling or cloudy urine*
- *After every urethral catheter change upon admission*
- *After treatment to document cure*

TABLE 1. Educational information for nursing staff regarding criteria for sending urine cultures

What Are the Benefits of Using This Checklist?

- ✓ Less work for nursing staff once they learn new rules
- ✓ Less worry for patients' families about falsely diagnosed infection





Ensure that staff knows when to use empiric antibiotics for possible UTI.



Review the evidence-based criteria for diagnosing UTI with staff.

WHY?

Many patients are stable enough to delay antibiotics until cultures are back. Using the evidence-based rules can reduce UTI over-diagnosis and over-treatment.

WHAT ARE THE BENEFITS?

- ✓ Avoiding possible overuse of antibiotics
 - ✓ Avoiding possible side effects
- ✓ Reducing the risk of resistant bacteria

When Indwelling Catheter Is Present:	No Indwelling Catheter Is Present:
<p>Presence of at least 1 of the following symptoms:</p> <ul style="list-style-type: none"> • Fever or rigors • Costovertebral tenderness • New-onset delirium 	<p><i>Acute dysuria alone</i></p> <p>OR Fever AND at least 1 of the following symptoms:</p> <p><i>Urgency, Frequency, Suprapubic tenderness, Hematuria, Flank pain, New incontinence</i></p>

TABLE 2. Educational information for primary care providers regarding criteria for empiric antibiotic treatment while awaiting culture results

Symptomatic urinary tract infection must have:

<p>1 of the following symptoms:</p> <ul style="list-style-type: none"> • Fever • Urgency • Frequency • Dysuria • Suprapubic tenderness 	AND	<p><i>A positive urine culture (10⁵ organisms/cm³)</i></p>
<p>OR</p> <p>2 of the following symptoms:</p> <ul style="list-style-type: none"> • Fever • Urgency • Frequency • Dysuria • Suprapubic tenderness 	AND	<p><i>2 urine cultures with the same uropathogen (10² organisms/cm³) or other positive findings</i></p>

TABLE 3. Educational information for primary care providers regarding diagnosis of symptomatic urinary tract infection

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Founded in 2010 and operating within Brigham & Women's Division of Pharmacoepidemiology & Pharmacoeconomics [DoPE], our resource center supports clinical outreach education programs across the United States, Canada, and beyond. With our trainings and ongoing program support, those educators visit front line clinicians, helping them make the best, evidence-based decisions. And those decisions improve the health of diverse populations, including underserved patients who need it the most.

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