

Urine Culture Diagnostic Stewardship

Aim to improve patient outcomes by optimizing the ordering of urine cultures.

Reducing Unnecessary Urine Cultures in Patients With or Without Urinary Catheters

Patients Without Urinary Catheters			Patients With Urinary Catheters		
Appropriate Dysuria, suprapubic pain, flank pain, Costovertebral angle (CVA) tenderness, or septic shock	Uncertain Fever or systemic leukocytosis with no other known cause	Inappropriate Altered mental status, or change in urine characteristics (color, sediment, smell)	Appropriate Dysuria, suprapubic pain, flank pain, Costovertebral angle (CVA) tenderness, or septic shock	Uncertain Fever, systemic leukocytosis with no other known cause, or delirium	Inappropriate Change in urine characteristics (color, sediment, smell)

Getting Started	Appropriate Practice	Inappropriate Practice
<ul style="list-style-type: none">Evaluate current processes for obtaining urine cultures (avoid automatic triggers or screening cultures with no appropriate indications)Evaluate practice patterns (avoid PAN culturing)Provide education on when it is appropriate to obtain urine culturesHave periodic audits on urine culture use to look for trendsPromote appropriate urinary catheter use to reduce risk of bacteriuria/funguria	<ul style="list-style-type: none">Use elevated urine white blood cell count as a criterion to reflex to urine culture when a clinician orders a urine culture (all settings)Obtain culture as part of an evaluation of sepsis without a clear source (CAUTI is often a diagnosis by exclusion)Obtain culture based on findings suggestive of CAUTI (example, pelvic discomfort or flank pain) <p>CAUTI: catheter associated urinary tract infection</p>	<ul style="list-style-type: none">Obtain culture based on pyuria in an asymptomatic patientObtain culture based on urine quality: color, smell, sediments, turbidity (does not constitute signs of infection)Utilization of screening urine cultures (whether on admission or before non-urologic surgeries)Routine standing orders for urinalysis or urine cultures without an appropriate indication"PAN" culturing (mindfulness in evaluating source is key)Obtain culture on asymptomatic elderly and people with diabetes (high prevalence of asymptomatic bacteriuria)Repeat urine culture to document clearing of bacteriuria (no clinical benefits to patient)

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