Improving Urine Culturing Practices

Key Points:
- Asymptomatic bacteriuria is defined as the presence of significant growth of bacteria in urine without signs and symptoms of urinary tract infection regardless of pyuria (white cells in the urine)
- Asymptomatic bacteriuria does not require antibiotic treatment except in:
  - Pregnant women
  - Patients undergoing urologic procedures in which mucosal bleeding is expected (NOT urinary catheter insertion or removal)
- It is common to find bacteria or white cells in the urine of patients without a urinary tract infection, particularly in residents of long-term care facilities, patients with chronic indwelling urinary catheters, patients on dialysis, and elderly patients
  - Pyuria should not prompt a urine culture if patient is asymptomatic
- Signs/symptoms of a urinary tract infection are urinary urgency, urinary frequency, pain with urination (dysuria), suprapubic pain, flank pain, fever, chills, or rigors (the later typically seen with pyelonephritis)
  - Isolated cloudy, dark or foul-smelling urine are not signs of a UTI and should not prompt urine cultures in the absence of signs and symptoms of a UTI

How Can Nurses Reduce Unnecessary Antibiotics Driven By Urine Cultures?
- Ensure that patients have an appropriate indication before obtaining a urine culture (see algorithm)

References