

ASYMPTOMATIC BACTERIURIA (AB)

FAQS

1. What is Asymptomatic Bacteriuria (AB)?

AB is a significant bacterial colony count in the urine without signs or symptoms of a urinary tract infection (UTI), reflecting colonization of the urinary tract ^[1].

2. What are Signs & Symptoms of a UTI?

In patients *without urinary catheters*: signs & symptoms include dysuria, urgent or frequent urination, suprapubic pain or tenderness ^[2, 3].

In patients *with urinary catheters*: signs & symptoms include flank pain; acute hematuria; pelvic discomfort; and fever, altered mental status, rigors, or malaise/lethargy with no other identified cause ^[2].

Signs & Symptoms NOT Recommended for the Diagnosis of a UTI Include:

- changes in the appearance or odour of urine alone ^[2]
- urinary retention in patients with spinal cord injury ^[1,2]
- leukocytosis alone ^[1,4]

3. What is the Prevalence of Asymptomatic Bacteriuria?

AB is common in populations including those with urinary catheters, spinal cord injury, and the elderly ^[1]. Of note, the incidence of bacteriuria associated with an indwelling urinary catheter is 5-7% per day ^[1].

4. Does Asymptomatic Bacteriuria Need Treatment?

With the exception of pregnant women, patients undergoing invasive urological procedures, and kidney transplant recipients in the early postoperative period, AB does not need antibiotic treatment ^[1, 5].

5. Should Patients with Surgical Implants (prosthetic valves, joint implants, etc.) be treated for Asymptomatic Bacteriuria?

UTIs are rarely associated with infections of surgical implant devices ^[6]. Evidence is lacking that AB causes implant-related infections or treatment of AB reduces implant-related surgical infection rates ^[1, 7]. For example, AB isolates did not match prosthetic joint infection isolates ^[7, 8]. Prosthetic joint infection rates did not differ between patients treated for AB preoperatively versus patients not treated for AB ^[7, 8].

6. What is the ASP initiative “Reducing Unnecessary Urine Cultures & Overtreatment of Asymptomatic Bacteriuria”?

This initiative is aimed at preventing patient harm from unnecessary antibiotics due to treatment for AB. It supports awareness of AB; orders for urine cultures, with urinalysis tests, only for patients with UTI signs & symptoms; and communication about the indication of urine culture orders. For more information about this initiative please contact Kerry-ann.smith@uhn.ca.

Did you know?

- Asymptomatic bacteriuria is commonly mistreated ^[9]
- Overtreatment of asymptomatic bacteriuria exposes patients unnecessarily to the risk of antimicrobial resistance & hospital acquired infections such as *C. diff* ^[1, 10]
- At MSH + UHN, 67% of urine cultures were ordered without clinical indication; of these patients, > 50% were treated for asymptomatic bacteriuria, receiving unnecessary antibiotic exposure ^[11]

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