

## **Journal Watch**

### **Positive urine cultures: A major cause of inappropriate antimicrobial use in hospitals?**

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**Reference:** Silver SA, Baillie L, Simore, AE. Can J Infect Dis Med Microbiol 2009; 20(4): 107-111.

#### **Abstract:**

Urine specimens are among the most common samples submitted for culture to microbiology laboratories. The objectives of the present study were to describe the indications for obtaining urine cultures in a cohort of hospitalized patients, and to determine the appropriateness of antimicrobial therapy in response to urine culture results.

#### **Strengths:**

Prospective study, with large numbers of urinalysis assessed.

Comprehensive assessments looking at:

- Location of the patient in the hospital,
- Site from which urine was obtained i.e. catheterized, non catheterized specimen,
- Patient symptoms including confusion, urinary symptoms, fever, growth in the urine, agents used to treat, duration of therapy, and effect on mortality.

#### **Weaknesses:** As identified by the authors:

- Study was completed in a teaching hospital, and may not be generalizable to other health care settings.
- Certain patient populations were excluded including febrile neutropenic patients with asymptomatic bacteriuria because of lack of clarity of treatment guidelines for these patients.
- Presence of negative urine cultures included in the study were a convenience sample, and may not have been representative of all patients without bacteriuria.

**Relevance to Palliative Care:** Infections are common in immunocompromised patients. It can be challenging to determine if febrile immunocompromised patients, more so those with indwelling catheters, whether they have a 'true' urinary tract infection. Although not specific to immunocompromised patients, this paper provides useful information on the association of patient symptoms, microbial growth in the urine, and physicians' decisions to pursue treatment.