CLINICAL PRACTICE ASSESSMENT

IN WOMEN OVER AGE 65 WITH SYMPTOMS OF A UTI ARE URINE TESTS NECESSARY?

CLINICAL QUESTION: In women over the age of 65 years with symptoms suggestive of UTI are urine tests (dipstick, UA and/or urine culture) necessary?

BOTTOM LINE: Urinary tract infection (UTI) treatment in patients over the age of 65 years should be based on clinical assessment and urinalysis (UA) with urine culture. Unlike in women under the age of 65 years, empiric therapy is not recommended, as well-designed large-scale studies do not exist. Additionally, the lack of acute urinary symptoms, increased co-morbidities, and the age-related increase in asymptomatic bacteriuria make the diagnosis of UTI in the elderly challenging. In this age group the diagnosis of UTI should be based on the presence of UTI specific symptoms in conjunction with UA and urine culture findings [SORT=C].

SYNOPSIS: Current treatment guidelines for acute UTI exclude frail elderly women with multiple co-morbidities who more commonly present with atypical UTI signs and symptoms. Generally, the diagnosis of UTI in elderly patients (ages 65 and over) should be based on clinical assessment including UA and urine culture [1].

Asymptomatic bacteriuria is common and its incidence increases with age. The incidence is 3.5% in women under age 65 and increases to 16-18% in women older than age 70 years. Asymptomatic bacturia is not associated with increased morbidity and therefore antibiotic treatment for asymptomatic bacteriuria is not indicated [2].

In the elderly, abnormal urine tests are insufficient to diagnose an acute UTI. The diagnosis also depends on specific signs and symptoms. Classic symptoms for lower UTI include acute dysuria, urinary frequency, suprapubic tenderness, urgency, polyuria and hematuria – these symptoms yield to other less specific symptoms with advancing age [3].

The probability of bacteriuria in healthy women (under the age of 65 years) with symptoms that lead to seeking care for a UTI is estimated between 50-80%. However, if they specifically exhibit dysuria and frequency then the probability increases to 90% [1]. In this same population, the probability of bacteriuria with mild symptoms manifested by the presence of only one sign or symptom is about 50%. A positive urine dipstick for leukocyte estrace or nitrates increases the probability to 80%; conversely, a negative dipstick decreases the probability to 20% [1].

While a urine dipstick is helpful when evaluating women under the age of 65 years it should not be used in the diagnosis of UTI in older people given the high incidence of asymptomatic bacteriuria. In the outpatient setting, a clean-catch urine should be collected for analysis. The UA will confirm pyuria (at least 10 WBC/HPF). The urine culture will identify bacteria and determine sensitivity to antibiotics [3]. The diagnosis of UTI cannot be based on urine culture alone as the presence of asymptomatic bacteriuria is high and cannot be considered abnormal unless acute urinary symptoms are present [3].
Upon treatment of a UTI repeat urine cultures are unnecessary for a test of cure. Evaluation of clinical response should be based on symptom improvement [2].

Dean’s infectious disease department is in agreement with these recommendations.

REFERENCES:


Originated 10/6/2014