**Urinary Tract Infections (UTIs)**

**For Providers**

**Myths and Facts**

**Myth:** Nursing home patients need 14 days of antibiotics to treat a UTI.

**Fact:** It used to be thought that all nursing home residents should be considered to have a complicated UTI and therefore need 14 days of antibiotics. However, recent evidence has shown **no benefit in treating most nursing home resident with long courses of antibiotics.** These long courses do, however, increase the risk for adverse effects including diarrhea and *C difficile* infection. **Most residents with cystitis can be treated safely with 3-5 days of antibiotics.**

**Myth:** Bacteria in the urine must be treated regardless of symptoms.

**Fact:** More than 50% of nursing home residents will have bacteria in their urine at counts of >100,000 colony forming units but no symptoms of a UTI. **This is asymptomatic bacteriuria.** Multiple randomized trials have shown there is no benefit to treating these residents with antibiotics as treatment does not decrease their risk of symptomatic infection or affect their morbidity or mortality. Treatment does however increase their risk of adverse drug events and developing resistant bacteria.

**Myth:** Confusion or a fall is an indication to check for a UTI.

**Fact:** This a common mistake due to the long propagated belief that UTIs will present differently in older adults. However, you are more likely to identify asymptomatic bacteriuria for which treatment is not beneficial. By assuming bacteriuria is the cause of the confusion or fall, you **risk missing the true underlying cause.** Instead of automatically ordering a urinalysis, consider active surveillance and monitoring of the patient.

**Myth:** The urinalysis defines the presence or absence of a UTI.

**Fact:** The urinalysis is reliable for ruling out a UTI as testing negative for both leukocyte esterase and nitrites has a 90-100% negative predictive value. However, the presence of leukocyte esterase and/or nitrites alone does not mean the patient has a UTI. **Up to 50% of well patients will have nitrites in their urine while up to 90% will have leukocyte esterase.** You must rely on a patient’s urinary specific signs or symptoms to diagnose a UTI.

**Myth:** For a patient with recurrent UTIs, prophylactic antibiotics will prevent further infections.

**Fact:** There is no evidence that suppressive antibiotics are effective for preventing UTIs in nursing home residents. They do, however, **increase the risk for adverse drug reaction, drug interactions, and resistant organisms.** There is evidence that vaginal estrogen may benefit some older women with recurrent UTIs.
For further diagnosis and treatment suggestions, please refer to the OPTIMISTIC UTI protocol.

References:


