FAST FACTS: Pain on Urination, Flank, and/or Suprapubic Pain

Pain due to infection within the urinary tract can be with the passage of urine (dysuria) and/or felt over the bladder or flank area when bacteria enter the urine (bacteriuria) via the urethra (urethritis), bladder (cystitis), or kidneys (pyelonephritis). Hence, the spectrum of a urinary tract infection (UTI) varies from simple cystitis to potentially life-threatening pyelonephritis (Matthews & Lancaster, 2011). Known as the second most frequent infection in long-term care (LTC) facilities, UTIs are challenging to identify and treat because they can be asymptomatic (limited to bacteria in the urine) or symptomatic (bacteria in the urine with localizing genitourinary (GU) symptoms) whereby management is clearly different. Treatment of asymptomatic bacteriuria is not recommended as it increases the rate of adverse drug effects from antibiotics, increases the rate of recurrent infections with multiple drug resistant (MDR) bacteria, and does not change survival, chronic GU symptoms, or the rate of symptomatic UTI (Genao & Buhr, 2012). When nurses facilitate assessment of symptomatic verse asymptomatic bacteriuria, improved patient outcomes result.

Normal changes of aging/Risks for UTI:
- General immunity wanes/worse with co-existing diabetes, cancer, or autoimmune disorders. **Often do not mount a fever.**
- Estrogen deficiency in women thins vaginal tissue/more vulnerable to bacterial invasion.
- Prostate hypertrophy → urinary retention/predisposes to chronic prostatitis/entrapped bacteria.
- Incontinence & functional decline → further weaken the elder’s ability to fight infection (skin breakdown).
- Indwelling urinary catheters (IUCs) ↑ the risk of UTI, hospitalizations, antibiotic resistance, & death.
- Asymptomatic bacteriuria in noncatheterized residents is estimated @ 18-57% for women & 19-38% for men (Genao & Buhr, 2012).

Recognition/Assessment:
1. **Vital signs, mental status, and level of pain.** Complete skin, cardio/pulm, and abdominal/back exam. Presence of back pain with tenderness (one side) per maneuver: worrisome for more severe infection extending to the kidney.
2. Review past history: UTI’s or catheterizations, kidney stones (see FAST FACT: Kidney Stones), or recent dehydration?
3. Review for any behavioral, nutritional, or functional changes.
4. Obtain a urine sample for dip stick assessment/is there a change in urine character?
5. Based on Major and Minor Symptoms follow the algorithm on the next page/along with your facility protocol. **NOTE: mental status change is a MAJOR symptom/a common presenting symptom.**

Considerations for FLANK pain due to kidney stones
Geriatric kidney stone formers represented 12% of all stone forming patients in a multi-institutional data base and their incidence, recurrence, and severity of recurrent disease are similar to younger patients, but geriatric patients commonly experience their first symptomatic stone later in life (Gentle, Stroller, Bruce, & Leslie, 1997).
Assessment Tool: Numeric and faces pain assessment tools can be found: [www.geriatricpain.org](http://www.geriatricpain.org)

Interventions
- Distinction between asymptomatic and symptomatic bacteriuria is extremely important. Mental status changes warrant rapid assessment for the possibility of infection along with the other “major” symptoms as outlined. Obtaining a urinalysis/urine culture and notifying the provider per protocol can then follow in a timely manner.
- Conduct frequent reassessment if a minor symptom is present, and attend to hydration, bowel, and sleep needs with documentation of time of onset to monitor persistence and further intervention(s).
- Non-pharmacologic: maintain a calm environment, reassure patient, and provide staff (family) support

Nursing Diagnoses
- Alteration in Comfort
- Alteration in Mentation
- Acute pain
- Impaired tissue integrity
- Risk for infection
- Risk for falls
- Risk for injury
References