16.3: Urinary Tract Infection

A urinary tract infection (UTI) is a common infection that occurs when bacteria, typically from the rectum, enter the urethra and infect the urinary tract. Infections can affect several parts of the urinary tract, but the most common type is a bladder infection (cystitis). Kidney infections (pyelonephritis) are more serious than a bladder infection because they can have long-lasting effects on the kidneys.\(^1\)

Some people are at higher risk of getting a UTI. UTIs are more common in females because their urethras are shorter and closer to the rectum, which makes it easier for bacteria to enter the urinary tract. Other factors that can increase the risk of UTIs include the following:

- A previous UTI
- Sexual activity, especially with a new sexual partner
- Pregnancy
- Age (Older adults and young children are at higher risk. Refer to the "Care of the Older Adult" chapter for more details about older adults.)
- Structural problems in the urinary tract, such as prostate enlargement\(^2\)

Symptoms of a UTI include the following:\(^3\)

- Pain or burning while urinating (dysuria)
- Frequent urination (frequency)
- Urgency with small amounts of urine
- Bloody urine
- Pressure or cramping in the groin or lower abdomen
• Confusion or altered mental status in older adults

Symptoms of a more serious kidney infection (pyelonephritis) include fever above 101 degrees F (38.3 degrees C), shaking chills, lower back pain or flank pain (i.e., on the sides of the back), and nausea or vomiting. It is important to remember that older adults with a UTI may not exhibit these symptoms but often demonstrate an increased level of confusion. Sometimes UTIs can spread to the blood (septicemia), leading to life-threatening infection called sepsis. Read more about sepsis in the “Infection” chapter.

When a patient presents with symptoms of a UTI, the provider will order diagnostic tests, such as a urine dip, urinalysis, or urine culture. Read more about diagnostic tests in the “Assessment” section of the “Nursing Process” chapter.

Interventions

Antibiotics are prescribed for urinary tract infections. Nurses provide important patient education to patients with a UTI, such as the importance of finishing their antibiotic therapy as prescribed, even if they begin to feel better after a few days. Patients should also be encouraged to drink extra fluids to help flush bacteria from the urinary tract. Additional patient education regarding preventing future UTIs includes the following:

• Urinate after sexual activity.
• Stay well-hydrated and urinate regularly.
• Take showers instead of baths.
• Minimize douching, sprays, or powders in the genital area.
• Teach girls when potty training to wipe front to back.