

## **VALLEY WOMEN'S CLINIC, PLLC**

17722 Talbot Road South  
Renton, WA 98055-5744  
Appointments: 425-228-0722  
Fax: 425-271-2566  
www.valleywomens.com

### **Understanding Bladder Infections (Urinary Tract Infections)**

#### ***What is a urinary tract infection?***

A urinary tract infection can occur anywhere in the urinary tract (the parts of the body that form and excrete urine). The normal urinary tract consists of two kidneys, the ureters, the bladder, and the urethra. The kidneys filter the blood and produce urine, which passes through the ureters (two narrow tubes) to the bladder. The bladder stores the urine until enough has collected to stimulate the urge to urinate. When that happens, the urine leaves the bladder and is excreted from the body through the urethra. Occasionally, bacteria get into the urinary tract and cause an infection. The three most common types of urinary tract infections are:

- Cystitis (infection of the bladder)
- Urethritis (usually caused by infection of urethra)
- Pyelonephritis (infection of the kidneys)

#### ***What causes a urinary tract infection?***

Cystitis and pyelonephritis usually are caused by bacteria (most frequently, *E. coli*) that are normally found in the colon or stomach and finally in feces. These bacteria are spread from the rectum or vagina to the urethra and then to the bladder and kidneys. Urethritis, on the other hand, is caused by sexually transmitted infections such as gonorrhea or chlamydia.

Females are more likely than males to get urinary tract infections because the vagina is located close to the urethra. Bacteria spread from the vagina or the rectum only have to travel an inch or two to reach a female's bladder. Sexual intercourse may be a common cause of urethritis and bladder infections. Bacteria in the vagina or on the genitals can enter the urinary tract during intercourse.

Birth defects in which a part or parts of the urinary tract are abnormal may also lead to urinary tract infections. Other causes include urinary tract stones (small hard formations of minerals, which can be very painful as they are "passed") and bladder tumors.

#### ***What are the symptoms of a urinary tract infection?***

The telltale symptom of urethritis is: A burning sensation during urination

Cystitis may be responsible for:

- A frequent urge to urinate
- Pain in the lower abdomen or pubic area
- Blood in the urine
- General malaise (not feeling well), often accompanied by a slight fever.
- Pyelonephritis can cause the symptoms associated with cystitis, listed above, as well as pain in the back or side, high fever, chills, nausea and vomiting. Sometimes a urinary tract infection may cause no symptoms. This is particularly true during pregnancy: about 4% to 7% of pregnant women have urinary tract infections without symptoms. This is one of the reasons physicians test a pregnant woman's urine for the presence of an infection. If present, the infection should be treated before it can harm her or her baby.

#### ***How is a urinary tract infection diagnosed?***

Your doctor can often diagnose a urinary tract infection just on the basis of your symptoms, a pelvic examination, and a simple test called a urinalysis. For a urinalysis, you will be asked to give a urine sample, which will be examined under a microscope. This test will determine if any abnormal bacteria or blood are present in your urine. If the cause of your infection is not clear, a urine culture may be needed. This means that your urine sample will be sent to a lab where it will be stored and observed for the growth of bacteria. This test can tell what type of bacteria is responsible for the infection and which antibiotics will best treat it.

#### ***How is a urinary tract infection treated?***

A number of very effective antibiotics are available to treat urinary tract infections that are due to bacteria. In some cases of urethritis and simple cystitis, just one dose of an antibiotic can cure the infection. For patients with more severe urinary tract infections, more days of antibiotic treatment may be necessary. Urethritis associated with sexually transmitted diseases or other vaginal infections may require more extensive treatment. It is very important to follow exactly your doctor's instructions for taking antibiotics. If you have been diagnosed with pyelonephritis, up to 6 weeks of antibiotic therapy may be necessary. Your doctor will probably want to do another urine culture after your treatment is finished to confirm that you have been cured. In severe cases of kidney infection, hospitalization may be necessary. A hospital stay might also be required for women who are diabetic, pregnant, or who cannot tolerate oral antibiotics.

#### ***Is a urinary tract infection dangerous?***

Cystitis usually is not dangerous, although it is very uncomfortable. It should be treated, however, because the bacteria that cause cystitis can spread from the bladder to the kidneys and cause pyelonephritis, which can result in permanent kidney damage, blood infections, or shock. Urethritis can also be harmful and, if left untreated, can lead to scarring and blockage of the urethra. A urinary tract infection during pregnancy is always of concern because it can progress to pyelonephritis or cause premature labor.

#### ***Are some women more likely to get a urinary tract infection?***

Experts estimate that between 10% and 20% of women will experience a urinary tract infection at some time in their lives and approximately 80% of women who have one infection will experience another one within a year. Pregnant women in particular may be more likely to get urinary tract infections than others because pregnancy changes the size and shape of the urinary tract. However, some researchers believe the increased number of urinary tract infections in pregnant women may be simply because women see their doctors more frequently when they are pregnant and this allows doctors to diagnose infections they would not otherwise have seen. After menopause, women may also be more likely to get urinary tract infections, possibly due to reduced levels of the hormone estrogen in this age group. The decrease in estrogen makes skin and tissues more delicate and this, in turn, may make the urinary tract easier for bacteria to infect.

#### ***How can I lower my risk of getting a urinary tract infection?***

- Use plenty of lubrication during sexual intercourse; it may be necessary to use a water-soluble lubricant
- Urinate after sexual intercourse
- Drink plenty of fluids regularly to wash out the bladder
- Urinate regularly; do not suppress the urge
- Wipe from front to back after a bowel movement.
- Recurrent urinary tract infections

Unfortunately, women who tend to get urinary tract infections may suffer three or more per year. If you have a problem with recurrent urinary tract infections, your doctor may refer you to a urologist (a urinary tract specialist) for further testing to determine the underlying cause of the frequent infections.