Urinary Tract Infections: Diagnosis, Treatment and Prevention

Every year, over 11 million women develop a urinary tract infection, (also known as a UTI, a bladder infection or acute cystitis). These infections are more common in women than men, primarily due to the normal female anatomy, with the urethra (tube leading from the bladder to the outside) located very close to the vaginal opening. This allows bacteria from the vagina and especially the rectum to enter the bladder and subsequently cause an infection. Sexual activity is the most common cause for developing a UTI, but pregnancy, advancing age, lack of estrogen, and diabetes are common contributing factors for developing these infections.

Typical symptoms from a UTI are pain with urination, frequent urination with the urgency to void, and possibly pelvic pain or pressure. More severe symptoms are a general ill feeling with fever, and possibly even confusion. However, it may be possible not to have any symptoms at all, which is why your urine is usually tested at the time of your routine office visit.

To properly diagnose a UTI, a urine sample can be quickly assessed in the office to confirm the presence of bacteria or its by-products. The healthcare providers will presumptively treat an infection with antibiotics, but a culture of your urine is required to determine the exact type of bacteria present, as well as to ensure that this bacteria has not developed resistance to the antibiotic prescribed. This test usually requires 48 hours to complete at the lab. If the practitioner determines that you need to be placed on a different antibiotic, you will be notified as soon as possible. The length of treatment is determined by the severity of the infection, or if you have any underlying medical conditions which could make curing the problem more difficult. You may also be given another medication along with the antibiotic, which acts as a “bladder anesthetic” to relieve the discomfort as the antibiotics begin to work. Another option is to add a teaspoon of baking soda to a half glass of water, and drink this twice a day.

The risk of not treating a bladder infection can result in the infection ascending into your kidneys and possibly damaging these vital organs. Treatment of these serious infections may require hospitalization for intravenous antibiotics.

Recurrent UTI’s (more than 3 per year), can be a symptom of a more serious problem that will require further investigation. However, even after an extensive evaluation, some women are simply more prone to infections, and “prophylactic” antibiotics may be used to limit the return of an infection.
For women you are more prone to bladder infections, prevention is key:

For women who are sexually active, voiding both before and after intercourse will limit the amount of bacteria in the bladder. Also, some lubricants, oils and spermicidal jelly may also make an infection more likely.

Voiding regularly throughout the day (every 2 to 3 hours) will limit the amount of bacteria in the bladder. You should also ensure that you empty your bladder completely, and if needed, by “double voiding” (urinate normally, stand up, then sit down again and attempt to finish emptying your bladder)

Drinking an adequate amount of liquids will continually wash out the bladder. Water is preferred, as soda, coffee and tea may make it more likely to get an infection

After a bowel movement or urinating, wipe from the front of the vagina or rectum toward the back, away from the urethra.

Frequent changing of sanitary napkins or tampons can limit infections.

Avoiding hot tubs or highly chlorinated pools, as well as removing your wet swimsuit as soon as possible, can also limit bacterial exposure.

Cranberry juice, and cranberry pills (no calories) have been proven to reduce the incidence of UTI's