## THE UROLOGY GROUP

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## **UTI IN MEN**

The function of the urinary tract is to clean waste products from the blood. The urinary tract begins with the kidneys which sit high in the back. Blood is filtered through the kidneys which extract excess fluid and waste products to make urine. Once the urine is made by the kidney, it is transported down through tubes called the ureters to the bladder. The bladder sits in the pelvis, which is in the area in the lower abdomen. The bladder stores urine until full then empties the urine to the outside through the urethra. The prostate, which is a gland that is part of the reproductive system, forms the first part of the urethra.

The typical symptoms of bladder infection are frequent urination, painful urination, and urgency - which is the feeling of the need to urinate immediately. In addition, there can be lower abdominal or pelvic pain. Blood in the urine may be present as well. Another symptom may be a sense of feeling the need to void further after urination, in spite of having just emptied the bladder. Low grade fever and low back pain may be present as well.

Infection in the urinary tract occurs when bacteria gain access to the bladder. Bacteria, normally present at the opening of the urethra, can ascend up the urethra to reach the bladder.

When infection occurs, the urinary system may be evaluated to determine if there is underlying disorder, such as growth, blockage or stone, which could put the patient's health at risk. Enlargement of the prostate, a condition which affects most men over age 40, may predispose to infection (see more details in BPH newsletter).

Studies available to assess the upper urinary system include CT urogram and renal ultrasound, which are imaging studies that allow examination of the kidneys. The lower urinary system may be examined by cystoscopy, an inspection of the bladder, prostate and urethra with a fiber optic camera. A bladder scan may be done to check post-void residual, which is the amount of urine remaining in the bladder after voiding.

Treatment strategies included the following measures:

Increased fluid causes the kidneys to produce more urine. When more urine is produced, the bladder fills more frequently and empties more often. More frequent emptying of the bladder helps to "wash out" infection from the bladder.

Urinary acidification, accomplished by taking vitamin C 250 mg twice a day (breakfast and dinner), makes it more difficult for bacteria to grow.

Cranberry extract pills, taken twice a day (breakfast and dinner) may help lessen the risk for infection, perhaps by reducing the ability of the bacteria to adhere (stick) to the lining of the bladder.

In addition to these general preventive measures, there are specific approaches with antibiotics which may used as well.

One measure is antibiotic suppression. A patient takes a low dose of an antibiotic once a day, usually at bedtime, for a period of several months to keep the bladder free of infection.

Another approach is self-directed treatment. Many men can tell when they get infection. Antibiotics are given to have on hand to start treatment once symptoms develop. The philosophy of this program is that the antibiotics are much more effective if they are used when the infection first begins than when they are used after infection has been present for several days.

Antibiotics choices include Macrobid (nitrofurantoin) and Trimpex (trimethoprim). These pills are well tolerated and safe to use in the above fashion.