Greenwich Hospital

# What is a Urinary Tract Infection/Urosepsis?PATIENT/FAMILY INFORMATION SHEET

What is a urinary tract infection or UTI?

A urinary tract infection, commonly referred to as a UTI, occurs when microorganisms such as bacteria, viruses, or fungi enter the urinary system and multiply. Urine is normally sterile, or free from microorganisms. The parts of the urinary system that are affected include the urethra, the urinary bladder, the ureters, and the kidneys. The kidneys remove waste and extra fluid from the blood stream and convert them to urine; the ureters are very narrow tubes that carry the urine from the kidneys to the urinary bladder; and the urethra is the tube that empties the urine out of the body.



Source: National Kidney and Urologic Diseases Information Clearinghouse http://kidney.niddk.nih.gov/kudiseases/pubs/cystoscopy/index.htm

## What causes a UTI?

UTI's are commonly caused by the following microorganisms:

Escherichia coli (E. coli)
Chlamydia
Mycoplasma

Usually when a UTI occurs, the microorganisms enter the urethra and begin growing there. They then will travel up the urinary tract into the bladder. If the infection is not treated, it may also spread up the ureters into the kidneys.

# Who is at risk for UTI's?

People at risk for UTI's include:

- Frail elderly
- Those with urinary catheters, or tubes placed in the bladder to empty it.
- Those with an obstruction such as kidney stones
- Those with any disorder that suppresses the immune system
- Those with any disorder that causes the inability to empty the urinary bladder, such as an enlarged prostate in men and uterine fibroids in women.

# What are the symptoms of a UTI?

- Frequent urge or feeling to urinate
- Pain or burning on urination
- Difficulty urinating
- Fever
- A feeling of pressure or fullness in the pelvic area
- Cloudy or foul smelling urine
- Blood in the urine
- If the kidneys are involved, there may also be pain in the lower back.
- Frail elderly may have atypical symptoms, such as confusion, weakness, or falls.

## How is a UTI treated?

Usually the doctor will ask you for a urine specimen to send to the lab to culture which microorganism is causing the infection. Medication will then be prescribed depending upon the results of this urine test. It is important to take all of the medication as prescribed by the doctor to eliminate the infection. Sometimes a repeat urine specimen will be ordered after the medication is completed to make sure that the infection is gone. It is also beneficial to drink plenty of water.

## Are there possible complications from a UTI?

In some patients with UTI's, the infection can progress further when microorganisms enter the bloodstream. This is called **urosepsis**. *This can be a* serious illness that can affect other organs in the body and requires prompt *attention*. Once microorganisms enter the bloodstream, this may cause your blood pressure to drop. This drop prevents vital body organs such as the brain and heart from getting the necessary amount of oxygen needed to function properly. Sometimes, a drug called a vasopressor, is given to keep the blood pressure up. Some patients require a transfer to the intensive care unit where special equipment is used to closely monitor the blood pressure for changes.

Treatment for urosepsis includes the use of medications, such as antibiotics for bacterial infections, to rid the body of the infection. Those at higher risk for urosepsis are the same as those at higher risk for UTI's. Because urosepsis can be so serious, it is important to recognize the symptoms of UTI and report them to your doctor promptly, especially if you are at higher risk for getting these infections.

## What prevention measures may be taken?

If you are prone to frequent UTI's, discuss prevention measures with your physician or health care provider.

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