

UTI

What is UTI (Urinary Tract Infection)?

Urine contains waste product of the body filtered by the kidneys and conducted into the bladder by 2 tubes, called ureters, on each side of the abdomen. The urethra is the tube through which urine flows when the bladder empties. So urine can be found in the kidneys, the ureters, bladder and urethra.

Under normal circumstances there are a few bacteria in the urine but these do not cause infection. The multiplication of bacteria and the release of toxins by these bacteria in the urine constitute a urine infection.

UTI Symptoms:

- High swinging temperature
- Sudden strong urge to pass urine
- Blood in the urine
- Passing urine frequently
- Cloudy urine
- Back pain usually localized to one side
- Lethargy

Diabetics and those on steroids may not have the classic signs of urine infection and these people have to be more vigilant.

Urine infections can be divided into 2 groups:

- **Urine infection in an otherwise normal urinary system** – This usually occurs in women. One in five women will have an episode of urine infection in their lifetime, some of them more than once. The opening of the urethra in women is located in the moist vagina and this makes it easier for bacteria to gain access into the bladder. More aggressive bacteria have the ability to stick to the wall of the bladder and this allows them to persist in the bladder in spite of bladder emptying. This is how urine infection occurs in an otherwise normal urinary system.
- **Urine infection due to an abnormality in the urinary system** – Almost all abnormalities in the urinary system can result in urine infection. The common denominator here is stagnant urine and persistence of bacteria. For example, bacteria may persist in stones and antibiotic therapy may not remove the bacteria completely as the stone offers them some form of protection. Similarly in bladder obstruction such as enlarged prostate (BPH), the resultant stagnant urine in the bladder is a potential source of urine infection.

How is urine infection treated?

The treatment of urine infection is based on appropriate antibiotic therapy and further investigation of patients suspected to have an abnormality in their urinary system which is predisposing them to urine infection. The use of appropriate antibiotic therapy requires an understanding of the common bacteria that cause urine infection and obtaining proper urine samples for culture. Sometimes in women with no abnormality in their urinary system, repeated urine infection may require low dose long term antibiotics (6 months to 1 year).

The doctor treating you will have to decide if you need x-rays of your urinary system to rule out any abnormality. The general guidelines are repeat urine infections, infections affecting the kidneys, infections in men, and infections by uncommon bacteria. If an abnormality is detected it will have to be treated on its own merit.