### **Upper tract UTIs**

If your doctor suspects that you have an upper tract UTI, they may also need to do a complete blood count (CBC) and blood cultures, in addition to the urine test. A blood culture can make certain that your infection hasn't spread to your blood stream.

#### Recurrent UTIs

If you have recurrent UTIs, your doctor may also want to check for any abnormalities or obstructions in your urinary tract. Some tests for this include Ultrasound of kidneys and bladder or a CT scan of the kidneys, a cystoscopy, which uses a small camera that's inserted through your urine pipe and up into your bladder

## Prevention of UTI

- Drink six to eight glasses of water daily
- Don'thold urine for long periods of time
- Talk to your doctor about managing any urinary incontinence
- For women for postmenopausal women, using topical estrogen prescribed by your doctor could make a difference in preventing UTIs. If your doctor believes that intercourse is a factor of your recurrent UTIs, they may recommend taking preventive antibiotics after intercourse, or long-term. Voiding immediately after intercourse is recommended to
- Taking daily cranberry supplements or using vaginal probiotics, like lactobacillus, may also help in the prevention

Dr. Rela Institute & Medical Centre is a multi-specialty quaternary care hospital located in Chennai. India.

The Institute is within the campus of Sree Balaji Medical College and Hospital, which is spread across 36 acres. It has 14 operating theatres with 450 beds, inclusive of 150 critical care beds.

The Institute is conveniently located 10 minutes from the Domestic and International Airport.

The hospital is designed to provide highly specialized care in various departments with a focus on multiorgan transplantation. Prof. Mohamed Rela, a world renowned surgeon in the field of Liver surgery and transplantation is the Chairman and Managing Director of the Institute.

In addition to quaternary & quality care, is also committed to provide day to day primary and secondary care to the local population, with facilities of international standards

The Institute would provide comprehensive support to international patients travelling for medical treatment

24 Hr Emergency **(3) 044-6666 7788** 



### DR. RELA INSTITUTE & MEDICAL CENTRE

No. 7, CLC Works Road, Chromepet, Chennai – 600 044, Tamil Nadu, INDIA. Tel: +91 44 6666 7777 Email: helpdesk@relainstitute.com

www.relainstitute.com





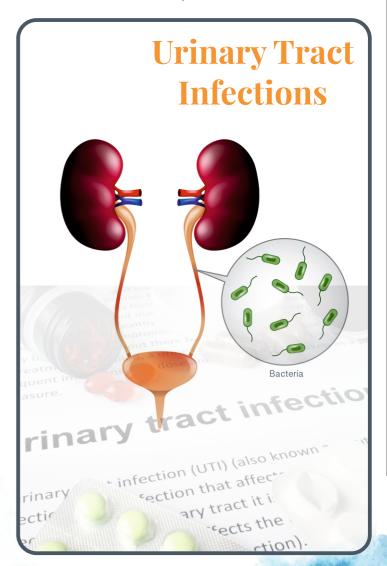






### DR. RELA INSTITUTE & MEDICAL CENTRE An International Medical Facility







Urinary tract infection (UTI) is an infection from microbes. These are organisms that are too small to be seen without a microscope. Most UTIs are caused by bacteria, but some are caused by fungi and in rare cases by viruses. UTIs are among the most common infections in humans.

A UTI can happen anywhere in your urinary tract. Most UTIs only involve the urethra and bladder, in the lower tract. However, UTIs can involve the ureters and kidneys, in the upper tract. Although upper tract UTIs are more rare than lower tract UTIs,

# What are the symptoms?

Symptoms of a UTI depend on what part of the urinary tract is infected.

#### Lower tract UTIs

They affect the urethra and bladder.

Symptoms of a lower tract UTI include

- Burning with urination
- Increased frequency of urination without passing much urine
- Increased urgency of urination
- Blood in urine
- Cloudy urine
- Urine that looks like cola or tea
- Urine that has a strong smell
- Pelvic pain in women

### Upper tract UTIs

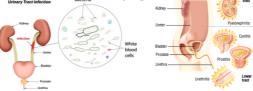
They affect the kidneys. These can be potentially life threatening if bacteria move from the infected kidney into the blood. This condition, called urosepsis, can cause dangerously low blood pressure, shock, and death.

Symptoms of an upper tract UTI include

- Pain and tenderness in the upper back and sides
- **©** Chills
- Fever
- Nausea
- **D** Vomiting

# What are causes and risk factors of an UTI?

- Age older adults are more likely to get UTIs
- Reduced mobility after surgery or prolonged bed rest
- Kidney stones
- Urinary tract obstructions or blockages, such as an enlarged prostate, kidney stones, and certain forms of cancer
- Prolonged use of urinary catheters, which may make it easier for bacteria to get into your bladder
- Diabetes, especially if poorly controlled, which may make it more likely foryou to get a UTI
- Pregnancy
- Abnormally developed urinary structures from birth
- Aweakened immune system
- Additional risk factors in women include naturally shorter urethra and decrease in estrogen levels. However, UTIs happen much more frequently in women than in men. The ratio is 8:1. This means that for every eight women who have LUTIs, only one



# What are the tests required for diagnosis?

If you suspect that you have a UTI based on your symptoms, contact your doctor. Your doctor will review your symptoms and perform a physical examination. To confirm the diagnosis of an UTI, your doctor will need to test your urine for microbes.

The urine sample that you give your doctor needs to be a "clean catch" sample. This means the urine sample is collected at the middle of your urinary stream, rather than at the beginning. This helps to avoid collecting the bacteria or yeast from your skin, which can contaminate the sample. Your doctor will explain to you how to

When testing the sample, your doctor will look for a large number of white blood cells in your urine. This can indicate an infection. Your doctor will also do a urine culture to test for bacteria or fungi. The culture can help identify the cause of the infection. It can also help your doctor choose which treatment is right for you.

# What are the treatments?

Treatment of UTIs depends on the cause. Your doctor will be able to determine which organism is causing the infection from the test results used to confirm the diagnosis.

In most cases, the cause is bacteria. UTIs caused by bacteria are treated with antibiotics.

In some cases, viruses or fungi are the causes. Viral UTIs are treated with medications called antivirals. Fungal UTIs are treated with medications called antifungals.

### **Supportive treatment**

Please drink adequate fluids to prevent dehydration from fever due to UTI and also to flush out the bacteria.

### **Home remedies**

Cranberry juice or cranberries don't treat a UTI once it's started. However, a chemical in cranberries may help prevent certain types of bacteria that can cause a bacterial UTI from attaching to the lining of your bladder. This may be helpful in preventing future UTIs.

#### **Antibiotics for an UTI**

Lower tract UTIs can usually be treated with oral antibiotics. Upper tract UTIs might require intravenous antibiotics. These antibiotics are given directly into your veins.

Initially before the results of urine culture which takes 2–3 days to come back, your doctor might start on an antibiotic by guessing which antibiotics might work. Sometimes, bacteria develop resistance to antibiotics. Results from your urine culture can help

# Special situations

#### **Untreated UTIs**

It's important to treat a UTI — the earlier, the better. Untreated UTIs become more and more severe the further they spread. An UTI is usually easiest to treat in the lower urinary tract. An infection that spreads to the upper urinary tract is much more difficult to treat and is more likely to spread into your blood, causing sepsis. This is a lifethreatening event.

If you suspect that you have a UTI, contact your doctor as soon as possible. A simple examination and urine or blood test could save you alot of trouble in the long run.