



Bladder and Bowel Community

Factsheet: Urinary Tract Infections

Urinary tract infections (UTIs) are common and occur at all ages. Women are particularly at risk and over 50% will experience at least one episode during their lifetime. The majority cause a short acute illness and most are easily treated with a course of antibiotics. Occasionally, depending on the site and type of infection, they can develop into a serious, even life-threatening condition.

A UTI is caused by a bacterial infection in the urinary tract. The urinary tract is where our bodies make and expel urine and is made up of the kidneys, the ureters, the bladder and the urethra. You can get an infection in the lower (bladder & urethra) or upper (kidney & ureters) part of the urinary tract. Upper UTIs are potentially more serious because there is a risk of kidney damage and in acute cases can cause kidney failure or blood poisoning.

Urinary tract infection is a term used to cover a variety of infections. The three main ones are:

Cystitis – infection in the bladder

Urethritis – infection in the urethra

Pyelonephritis – infection in the kidney

Cystitis (lower UTI)

If bacteria reach the bladder, they can multiply and irritate the bladder lining, causing the symptoms of cystitis.

The main symptoms associated with bacterial cystitis include:

- Pain when urinating
- An urgent need to pass water but only passing small amounts
- A constant feeling of the need to urinate even when the bladder is empty
- Urine that can be cloudy and dark and strong smelling
- Lower abdominal pain and/or a mild fever

What can cause cystitis?

In most cases cystitis is caused by a bacterial infection although there are other causes too. Bacteria can enter the urinary system in different ways, and these can include:

- Sexual intercourse - this may introduce bacteria into the bladder
- Hygiene - this is a common cause in women as women have a shorter urethra than men and it is closer to the anus, increasing the risk of bacteria being transferred to the opening of the urethra.
- Pregnancy - when pregnant, pressure from the uterus may result in incomplete emptying of the bladder, and this can encourage bacteria to grow.
- Diabetes - can affect the bladder by preventing it from contracting and not emptying properly, the urine can also contain a lot of sugar which can encourage bacteria to grow.

- Postmenopausal changes - postmenopausal women experience a decrease in hormone levels which can cause changes in the body. These changes may include reducing the normal defences of the urethra and allowing harmful bacteria to grow.
- Catheters - bacteria may colonise in the urine if a catheter has been inserted into the bladder. If the catheter is in place for a long period of time, it is inevitable that the bacteria will grow and the bladder will then become infected.
- Kidney / bladder stones - Can cause bladder irritation.
- Men with prostate problems or prostatitis. Benign prostatic hyperplasia (BPH) is an enlargement of the prostate and can cause obstruction in the urinary tract, leading to an increased risk of infection.

Other causes of cystitis

- Sexual intercourse and can also bruise the urethra and bladder causing irritation
- Irritants - bubble baths and fragranced products can irritate the urethra and the bladder

It is important to see your GP if you think you have an infection. He or she will test a urine sample for bacteria and if present will prescribe antibiotics. You can help the treatment process by drinking plenty of water (around 1.5 - 2 litres or 6-8 glasses every day). Painkillers, such as paracetamol or an anti-inflammatory such as ibuprofen can also be taken if needed. Drinking cranberry juice may also help reduce infections, one to two glasses a day can help whilst you have an infection or a glass every day as a maintenance dose if you suffer from recurrent infections (people taking Warfarin should avoid cranberry juice, and diabetics should check the sugar content).

Urethritis (lower UTI)

Urethritis is inflammation of the urethra which may be caused by an infection. The urethra is the tube from the bladder through which urine flows out of the body. Infections are generally caused by bacteria entering the urinary tract via the urethra and in most cases can be easily treated with a course of antibiotics. Symptoms are generally similar to those for Cystitis and it is advisable to visit your GP if you think you may have an infection.

Urethritis is one of the most common reasons for men to visit their local sexual health clinic with around 80,000 cases of urethritis diagnosed in men visiting clinics every year.

When the cause of urethritis is unidentifiable, the term non-specific urethritis (NSU) is used. A NSU can have a number of possible causes, but it is estimated that the STI chlamydia is responsible for nearly half of all male cases.

NSU can cause different symptoms in men and women.

The symptoms of NSU in men can include:

- a white or cloudy discharge from the tip of the penis
- a burning or painful sensation when you urinate
- the tip of your penis feeling irritated and sore
- a frequent need to urinate

NSU tends to cause no noticeable symptoms in women unless the infection manages to spread to other parts of the female reproductive system, such as the womb or fallopian tubes. If the infection does spread, a woman may develop pelvic inflammatory disease (PID), which is a serious health condition that can cause persistent pelvic pain. Repeated episodes of PID are associated with an increased risk of infertility.

What causes NSU?

- The sexually transmitted infection (STI) chlamydia is thought to be responsible for almost half of all cases of NSU in men. In women, about 4 out of 10 cases of NSU may be caused by chlamydia.
- Bacteria that usually live harmlessly in the throat, mouth or rectum can cause NSU if they manage to find their way into the urethra.

Non-specific urethritis will usually be treated with antibiotics, and it may take 14-21 days before the symptoms disappear completely.

Pyelonephritis

A kidney infection is a painful, unpleasant illness that usually happens when bacteria travels up from your bladder into one or both of your kidneys. The kidneys and ureters are often both infected at the same time.

Often the symptoms come on quickly, within a few hours, and they can make you feel feverish, shivery, sick and with a strong ache or pain in your back or side.

Symptoms of Pyelonephritis (Upper UTI)

The symptoms may include those of a lower UTI (see Cystitis above) as well as:

- High temperature (over 38°C or 101°F)
- Nausea or vomiting
- Shivering or chills (Rigours)
- Pain in lower back (may only be one side)

If you have any of these symptoms you should seek medical advice as soon as possible.

What causes Pyelonephritis?

A kidney infection usually happens when bacteria, often E. coli, gets into the urethra from the anus and then travels up through the bladder into one of the kidneys.

Most people can be treated at home by taking a course of antibiotics and painkillers too. It's also important to drink plenty of fluids because this will help to flush out the bacteria from your kidneys. If you're frequently passing pale coloured urine then that is a good sign that you're drinking enough fluids.

Further Information

If you think you may have a UTI it is most important to make an appointment to see your doctor straight away. You may also wish to seek advice from your local continence clinic. The continence clinics are run by the NHS and you don't always need to be referred to a clinic by your GP, as some clinics will allow you to book an appointment yourself. To find your nearest continence clinic please call our office on 01926 357220.

The Bladder and Bowel Community provides information and support for people with bladder and bowel issues. We publish a wide range of user friendly booklets and factsheets.

For more information please call us on 01926 357220, email help@bladderandbowelfoundation.org or write to us at The Bladder and Bowel Community, 7 The Court, Holywell Business Park, Northfield Road, Southam, CV47 0FS.

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