

## Cystitis explained

Cystitis is an infection of the bladder that almost always follows (is secondary to) bacterial infection in the urine. It is the most common type of urinary tract infection (UTI), particularly in women.

The bladder is a muscular bag that stores urine from the kidneys. Urine leaves the body through a tube called the urethra. Cystitis occurs when bacteria travel up the urethra, infect the urine and inflame the bladder lining. Most women will experience cystitis at least once in their lives. While it is painful and annoying, it isn't dangerous or contagious and the infection can't be passed on to your partner during sex.

If left untreated, the infection can 'backtrack' deeper into the urinary system from the bladder and reach the kidneys. **A kidney infection is serious and needs prompt medical attention** as it can cause kidney damage or even kidney failure.

### Painful urination

Cystitis can be mild to severe. The symptoms include:

- Frequent urge to urinate, if only to pass a few drops
- Burning pain or a 'scalding' sensation on urination
- Strong smelling urine
- Cloudy or bloody urine
- Lower abdominal pain.

### The *E. coli* bacteria

The most common bug or bacteria causing urinary tract infection is *Escherichia coli* (*E. coli*). The bacterium is often found when the urine is examined under a microscope; this test is called a microscopy and culture (M&C) of urine. *E. coli* is commonly found in the digestive tract and bowel. Under normal conditions it is harmless. However, *E. coli* thrives in the acidic environment of the bladder, where it multiplies and inflames the bladder lining.

### Women are more at risk

Women in their late teens and older are most susceptible to cystitis, especially if they are sexually active. The female urethra is only 4cm long, which gives bacteria easy access to the bladder. Female sex hormones influence the vaginal secretions that affect the ability of bacteria to survive. This makes a woman more susceptible to infection during certain times including:

- Certain stages of the menstrual cycle
- During pregnancy
- During menopause
- After a total hysterectomy.

### Men and the elderly

Men tend to get cystitis later in life. Trouble with urine flow in men may indicate problems with the prostate gland. Cystitis is common in elderly people, particularly if they are unwell. Bladder catheters and some urinary tract operations may also increase the risk of cystitis.

### Children

Cystitis in a child always needs to be investigated because it may indicate a more serious condition such as vesico-ureteric reflux. This is a bladder valve abnormality, which allows urine to flow back towards the kidneys.

### Dealing with an attack

The earliest symptom of cystitis is usually a faint prickling feeling on passing urine. It is possible to get rid of mild cystitis, if you take action immediately. Some suggestions include:

- Drink plenty of liquids.
- Take a commercial urinary alkaliser or one teaspoon of baking soda (bicarbonate of soda) in water.

### **Seek medical advice**

Medical advice needs to be obtained promptly if self-help treatments aren't working. The doctor usually tests the urine to check which micro-organism is present. It is important to see a doctor if a kidney infection or kidney stones are suspected because lasting damage or even kidney failure can occur if these conditions are left untreated.

### **Long-term prevention**

In some women, one bout of cystitis allows the urinary system to build up a type of immunity and further bouts are rare. For other women, cystitis can occur quite regularly. Although not always backed up by research, some women have found the following suggestions useful:

- Go to the toilet to pass urine as soon as you feel the urge, rather than holding on.
- Drink plenty of water every day to flush the urinary system.
- Wipe yourself from front to back (urethra to anus) after going to the toilet.
- Wash your genitals before sex and encourage your partner to do the same.
- Urinate after sex.
- Wear cotton rather than nylon underwear.
- Avoid wearing nylon pantyhose, tight pants or tight jeans.
- Don't use perfumed soaps, talcum powder or any type of deodorant around the genitals.
- Avoid bubble baths.
- Treat vaginal infections such as thrush or *Trichomoniasis* promptly, since these organisms can encourage cystitis.

Controlled trials have shown that cranberry juice may decrease the number of UTIs with symptoms over a 12-month period in women. Cranberry juice appears to lower the ability of *E. coli* to stick to the urinary tract lining cells. Cranberry products can also be effective in reducing the risk of UTIs in women who have had recurrent infections. Let your doctor know if you're having cranberry juice as it can alter the effectiveness of some antibiotics.

### **Regular and severe attacks**

Sometimes self-help treatments don't work and medical assessment and investigation is needed. Cystitis can be treated with a course (or courses) of antibiotics. Regular and severe attacks of cystitis should be investigated, because an underlying disorder – such as kidney stones – may be the trigger.

### **Where to get help**

- Your doctor
- Your pharmacist
- Kidney Health Australia Information Line Tel. 1800 4 KIDNEY (543 639), TTY 1800 005 881

### **Things to remember**

- Cystitis is an inflammation of the bladder and is usually caused by the bacterium *Escherichia coli* (*E. coli*).
- Treatment includes drinking plenty of water and taking urinary alkalisers and antibiotics.
- Regular and severe attacks should be investigated and treated by your doctor.
- A kidney infection is serious and needs prompt medical attention.

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Kidney Health Australia

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