
Bacterial Cystitis

What is a Bacterial Cystitis?

Bacterial cystitis is an inflammation of the bladder caused by bacteria entering the bladder. Most commonly the infection starts when bacteria enter via the urethra.

How common is Bacterial Cystitis?

Bacterial Cystitis occurs most commonly in women as compared to men and children. Between one or two out of every five women in the UK will get cystitis at some point in their life.

What are the risk factors or Bacterial Cystitis?

Bacteria may be introduced into the urinary system for many reasons. For example:

- Poor Hygiene is a common cause in women, due to females having a shorter urethra than males and its situation close to the back passage (anus).
- Poor Bladder Emptying leaves residual urine in the bladder. This can lead to an increased amount of bacteria (or other microorganisms) in the bladder, urethra and kidneys. Ill-fitting diaphragms used for contraception may press against the bladder resulting in incomplete emptying of the

bladder. During pregnancy pressure from the uterus may result in incomplete emptying of the bladder, thus encouraging bacteria to grow. Prolapse of uterus or vagina can cause similar problems.

- Catheters – During catheterisation, trauma (damage) may occur to the urethra or bladder, which may increase the danger of infection.
- Abnormalities in the urinary system – Boys and young men may suffer from repeated infections.
- Abnormal vaginal flora may occur after the menopause increasing the risk of bladder infections.
- Sexual intercourse may introduce bacteria to, or cause bruising of, the urethra and cystitis-like symptoms. Sexually transmitted diseases (STD) such as chlamydia and gonorrhoea can cause symptoms similar to cystitis.
- Women's Underwear – It has been proven that wearing thongs can bring bacteria from the anus forward to the urethra (bladder opening).
- Diabetes- The urine of diabetics can contain a lot of sugar, encouraging bacteria to grow.

What are the symptoms of Bacterial Cystitis?

- Burning or stinging pain when urinating (dysuria)
- Frequent need to pass small amounts of urine
- Feeling of urgency to pass urine even when the bladder is empty
- Cloudy/dark urine, which may have a strong smell

Additional symptoms may include:

- Blood in urine (haematuria)
- Mild fever and chills
- Painful sexual intercourse

- Dull pain in the lower back or abdomen
- Fatigue
- Generally feeling unwell
- Nausea

These symptoms affect routine life due to lack of sleep, pain, frequency. It can disrupt work and relationship especially if cystitis follows sexual intercourse. Repeated doses of antibiotics can lead to vaginal thrush.

How is Bacterial Cystitis Diagnosed?

With mild symptoms no investigations are required before starting the treatment. A specimen of mid-stream urine (MSU) should be collected in a sterile container provided by your GP. The GP will perform a simple urine test and may also send the sample to the hospital for a full culture test. Your GP will then prescribe the most suitable antibiotics required. If repeated urinary tract infections occur, you may be referred to see a consultant urogynaecologist or urologist for further investigations.

How to prevent Bacterial cystitis?

- **Fluid Intake:** Increase your fluid intake to at least two liters a day. You should preferably drink water or diluted squash. Avoid alcohol, pure fruit juices, tea or coffee as they can irritate the bladder. Cranberry juice may help as it can prevent some bacteria from growing. You can take it regularly in between the cystitis episode to prevent infection. Avoid using high sugar product.
- Wear clothes made of natural materials such as cotton or linen. Do not wear thongs or items that are not natural cotton.

- **Hygiene:** Always wipe from front to back when using the toilet. Always wash the anal area after a bowel movement.
- Empty your bladder as soon as you feel the need.
- **Diet:** Increase your intake of vegetables. Healthy diet increases your immunity and reduces the infections. Sugar encourages the growth of bacteria, so try and reduce the amount of sugar in your diet. Remember sugar is often added to foods in which we don't expect it to be in, for example, baked beans. Try and select the reduced sugar options that are available for many foods.
There are some alternative preparations available like D-Mannose, Ura Ursi (Bearberry) supplements, Nettle Tea or Manuka Honey.
- Oestrogen replacement treatment in the form of pessaries or topical cream may prove useful.
- Avoid the use of spermicidal products as it can destroy lactobacilli (good bacteria). Wash the genital area prior to sex and urinate within 15 minutes afterwards to help flush away any bacteria.
- You may need to cease using feminine perfumed products

How is bacterial cystitis treated?

- Increase your intake of fluid to flush out the system and dilute the urine. Drink bland fluids such as water or fruit squash. Avoid alcohol, caffeinated, carbonated and acidic drinks, such as orange juice as these can irritate the lining of the bladder
- Alkalisising the urine helps to eradicate bacteria and sooth the bladder. Use Bicarbonate of soda, 5 ml (one teaspoon) in half a glass of water, 2 - 3 times a day. However, due to its high salt content it should only be taken for short periods of time. It should not be used in patients with high blood

pressure or heart problems. Other urine alkalinisers such as sodium or potassium citrate are available from your pharmacy. Please check with your GP or pharmacist to ensure that these can be taken in addition to any other medication.

- To relieve pain take a simple painkiller such as paracetamol or ibuprofen. Hot water bottle helps to relieve discomfort.

If symptoms continue for longer than 2 - 3 days, always consult your GP. If you are pregnant consult your GP straight away. Your GP will prescribe appropriate antibiotics for the infection.

Treatment for recurrent cystitis:

Women who get cystitis recurrently may be prescribed a course of antibiotics to keep at home which they can take at the onset of an attack. Sometimes a low dose of antibiotics is prescribed for three to six months to reduce the risk of infection. If you get cystitis after sexual intercourse you may be advised to take a single dose of antibiotics immediately afterwards to prevent an attack. It is important to have a urine sample sent off to the laboratory to confirm whether an infection is present and to discover which antibiotic is required.

Recurring infections should be investigated and a referral to a consultant may be recommended.

Recurrent infections can be treated with Intravesical treatments placed directly into the bladder via a small catheter. These include Cystitstat®, Uracyst®, iAluRil®, and Gepan® instillation.

Helpful links: www.cobfoundation.org