

Recurrent Urinary Infections

Urinary tract infections (UTIs) are common and usually get better with antibiotics. But some people get recurrent or chronic infections and these people are often not helped by a standard approach.

There are several problems:

1) Testing underestimates infections.

Standard testing may only pick up 60% of infections. A study from Ghent in 2017 found PCR tests (not available on the NHS) picked up 95% of E Coli infections whereas standard tests picked up only 80%. Other tests such as "broth tests" are also more accurate but take up to 5 days to obtain results. DNA sequencing may also pick up more infections but may not be 100% accurate.

2) **Antibiotic courses are often not long enough.** NICE recommends a 3 day course of nitrofurantoin for a UTI but independent data have found a third of patients given the 3 day course had recurrences but none given a 7 day course.

3) **Patients with Recurrent infections and negative tests are disbelieved.** The campaign group CUTIC (Chronic Urinary Infection Campaign) believes this is common so the patient ends up getting no treatment and the infection gets embedded in the bladder wall. Worse, still they may get given anti-depressants.

Other Approaches

Vitamin C taken to bowel tolerance (when the bowels get slightly loose) and then reducing slightly is **a highly effective strategy for any infection**. The dose is usually about 2 grams every 2 hours (see Vitamin C leaflet). Vitamin C powder is the best way of doing this.

Another good natural remedy is **D Mannose**. A study in 2014 showed it works as well as antibiotics. However it only helps UTIs caused by E Coli (about 90% of infections). E Coli normally locks on to the walls of the urinary canal causing pain and discomfort but D Mannose sticks to the E Coli so then slips straight through before it can cause problems.

The recommended dose of D Mannose is 2000mg (2 grams) four or five times daily and 1000mg for children. For prevention the dose is 500mg to 1000mg twice daily. Many health food shops stock this remedy).

Berberine (goldenseal) is also effective for similar reasons. The dose is 500-800mg three times daily. The herb Uva ursi (bearberry) is also useful.

Many people take cranberry juice but this often loaded with sugar or artificial sweeteners as pure cranberry juice doesn't have a pleasant taste. In addition, many juices contain less than 30% cranberry. **Cranberry tablets** are a better bet.

Vitamin A and E deficiencies are both associated with increased risk of urine infection. Take 400IU Vitamin E as D-alpha tocopherol (not DL-alpha tocopherol) during attacks and 5-10,000 IU of beta-carotene. A study in 2021 found patients with recurrent UTIs had lower zinc levels. Zinc is a key component of the immune system so taking extra zinc would make sense.

Keeping the urine alkaline also helps. Potassium citrate is widely available as effervescent tablets (Effercitrate), liquid (Cymaclear) or sachets (Cystopurin). Taking two Alka-Seltzers in a glass of water at the onset of symptoms is another way of doing this.

The antibacterial agent Hiprex (methanamine hippurate), which can be bought over the counter (or prescribed), can help in preventing urinary infections. It was found to be as effective as long-term antibiotics in preventing urine infections and the majority of women had dramatic reductions in infections. In the study published in the BMJ conducted by Professor Harding in 2022, it prevented 50% of infections. The dose is 1 gram twice daily.

Using SSKI (a saturated solution of iodide solution) 15 drops four hourly (but not during the night has proven effective. Iodide kills bacteria (and viruses). This should work within 4 days. It won't work if it is not a bacterial infection. If there is no response try L arginine 2 or 3 grams three times daily.

85% of our immunity lies in our gut. The good bacteria keep most infections at bay but are under threat from antibiotics and the modern diet which is high in sugar and processed foods. Taking a probiotic will help but only if you also feed the "good" bugs" with a diet high in vegetables, low-sugar fruits (apples and pears are good substrates for these bugs), nuts and seeds and keep the diet low in sugar and refined carbohydrates (however dark chocolate does feed the good bugs). You can also add foods made with good bacteria (kefir, sauerkraut, cider vinegar).

As you can see there are many options and some may work better than others for a particular individual.

A related problem is **interstitial cystitis**, a poorly understood condition with symptoms of bladder pain, frequent urination, including urination at night.

This is most likely due to inflammation in the bladder. The cause is unknown but some people are intolerant to foods and drinks and some may be allergic to bacteria in their bladder. In one study 4 out of 6 had **sulphites** in their bladder. This is thought to be due to an inability to break down sulphites (found in many foods, especially fruit juices, wines and dried fruits). This is often helped by taking a molybdenum supplement and avoiding sulphites. However, sensitivity to other chemicals, such as formaldehyde can be involved.

A treatment that may help is **MSM (methylsulphonylmethane)**. This is a sulphur-containing supplement that is found naturally in the

body. It is also found in animals and plants. It has a slightly bitter taste. (The parent compound, DMSO, has been approved as a treatment for interstitial cystitis by the FDA and is used as a bladder wash).

The usual dose is up to 8 grams daily but it has typically been often been used at a higher dosage (20-40 grams daily) for interstitial cystitis. It has no toxic effects in animals at doses equivalent to 500 grams daily in humans. Stop if you get nausea or loose stools and reduce the dose slightly. It can also improve energy, help nail and hair growth, reduce allergies and lead to a smoother skin.

People who use **catheters** are prone to recurrent urine infections. These often become a real problem and resistant to treatment. However, this can be resolved by **adding 30mls of 3% hydrogen peroxide** to the catheter bag –this will keep the bag sterile (free from infection) for 8 hours.

Some people have been helped by the vaccine, Uromune, which protects against bacteria that can trigger urine infections. It is 65% effective. It is used in private clinic sand cos about £400.