Introduction

Cystitis or “inflammation of the bladder” is a term used to describe a collection of urinary symptoms, including pain on passing urine, frequency of urination and an urgent need to pass small volumes of urine. The need to pass urine during the night, lower abdominal pain and low back pain are also common symptoms.

Cystitis is a common condition in women during their reproductive years, and is usually caused by an infection with bacteria called Escherichia coli. Although antibiotics are usually prescribed, approximately half of all cases of cystitis in women resolve within three days, even without treatment. Women with mild symptoms or those waiting until they can see their doctor may be managed using medicines that provide symptom relief, such as analgesics, including paracetamol or ibuprofen; a urinary anaesthetic agent, such as phenazopyridine that numbs the bladder; or a urinary alkaliniser. These medicines do not treat the infection, but may be taken until the antibiotic treatment is started, or for symptomatic relief in the first 24-48 hours before the antibiotic starts working.

The acidic urine produced as a result of bacterial infection is thought to be responsible for the pain felt when passing urine. Therefore, alkalinisation of the urine, i.e. increasing the pH of the urine, can provide symptomatic relief. However, it is important to remember that while it eases discomfort, alkalinising the urine does not have an antibacterial effect, and patients should see their doctor if the symptoms do not resolve within two days.

The pH of the urine can be increased by taking urinary alkalinisers. These medicines are usually bicarbonate or citrate salts used alone or in combination, e.g. sodium bicarbonate, sodium citrate and potassium citrate. These agents may be helpful:

- In relieving painful urination caused by bladder infections in women (cystitis) when the symptoms are mild
- For use until the patient can consult her doctor and antibiotic treatment may be commenced
- For use together with an antibiotic for the first day or two for symptom relief until the antibiotic starts working.

Urinary alkalinisers for cystitis in women

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Do:
- Use a urinary alkaliser only for mild bladder infection symptoms in women or for symptomatic relief until the patient can consult her doctor

Don’t:
- Exceed the recommended dose of the urinary alkaliser, as stated on the manufacturer’s package insert
- Use a urinary alkaliser if the patient is taking the urinary antiseptic, nitrofurantoin or a quinolone-type antibacterial agent as these medicines work best if the urine is acidic, i.e. with a pH of 5.5 or lower
- Use urinary alkalinisers in patients who have kidney disease
- Use sodium salt in patients who have high blood pressure, in anyone with heart disease or in pregnant women
- Use a urinary alkaliser which contains potassium in patients taking potassium-sparing diuretics or angiotensin-converting enzyme inhibitors used for high blood pressure

Refer the following people to the doctor:
- Men, children or pregnant women with symptoms of cystitis
- Women who have symptoms of cystitis, as well as any blood in the urine
- If the patient also reports symptoms such as fever, nausea, vomiting, loin pain and tenderness. These symptoms suggest a more serious urinary tract infection, such as an infection in the kidneys
- If urinary alkalinisers do not resolve symptoms within two days of treatment
- Women with recurrent symptoms of cystitis

A word on treatment:
- Drink plenty of fluids. It is important to get the urine flowing to help flush out the bladder
- Take urinary alkalinisers dissolved in water, followed by additional water, or as recommended in the package insert
- Reduce the intake of coffee, tea and alcohol as these may further irritate the bladder
- There is only limited proof that cranberry-based products are effective in treating cystitis symptoms

Bibliography