# What is Interstitial Cystitis?

nterstitial cystitis (IC) is a chronic inflammatory condition of the bladder. Its cause is unknown.

"Common" cystitis, also known as a urinary tract infection, is caused by bacteria and is usually successfully treated with antibiotics. Unlike common cystitis, IC is *not* caused by bacteria and does not respond to conventional antibiotic therapy. It is important to note that IC is not a psychosomatic disorder nor is it caused by stress.

## Who is Affected?

IC can affect people of any age, race or sex. It is, however, most commonly found in women. Recent epidemiological data suggest that there may be 1,000,000 or more cases of IC in the US.

#### Symptoms

Some or all of these symptoms may be present:

**FREQUENCY:** Day and/or night frequency of urination (up to 60 times in severe cases). In early or very mild cases, frequency is sometimes the only symptom.

**URGENCY:** The sensation of having to urinate immediately, which may also be accompanied by pain, pressure or spasms.

PAIN: Can be in the lower abdominal, urethral or vaginal area. Pain is also frequently associated with sexual intercourse. Men with IC may experience testicular, scrotal and/or perineal pain, and painful ejaculation.

OTHER DISORDERS: Some patients also report muscle and joint pain, migraines, allergic reactions and gastrointestinal problems, as well as the more common symptoms of IC described above. It appears that IC has an as yet unexplained association with certain other chronic diseases and pain syndromes such as vulvar vestibulitis, fibromyalgia and irritable bowel syndrome. Many IC patients, however, have only bladder symptoms.

The ICA does not engage in the practice of medicine. It is not a medical authority nor does it claim to have medical knowledge. In all cases, the ICA recommends that you consult your own physician regarding any course of treatment or medication.

#### Diagnosis

Most IC patients have difficulty obtaining a diagnosis. To make a proper diagnosis of IC, these steps are typically followed:

Take urine cultures to determine if there is a bacterial infection present.

Rule out other diseases and/or conditions that have symptoms resembling IC. These diseases may include bladder cancer, kidney problems, tuberculosis, vaginal infections, sexually transmitted diseases, radiation cystitis and neurological disorders

Perform a cystoscopy with hydrodistention under general anesthesia if no infection is present and no other disorder is discovered. If distention under anes thesia is not performed, the diagnosis of IC may be missed. Cystoscopy during a routine office visit may not reveal the characteristic abnormalities of IC and can be painful for those who have IC. It is necessary to distend the bladder under general or regional anesthesia in order to see the pinpoint hemorrhages on the bladder wall that are the hallmark of this disease. A biopsy of the bladder wall may be necessary at this time to rule out other diseases such as bladder cancer and to assist in the diagnosis of IC. IC is not associated with bladder cancer.

#### Ireatments

At this time there is no cure for IC, nor is there an effective treatment which works for everyone. However, a vast majority of IC patients are helped by one or more of the following treatments:

## ORAL MEDICATIONS

**ELMIRON**\* (pentosan polysulfate sodium): Elmiron received FDA approval in 1996. It is the only oral medication approved specifically for use in IC. It is believed to work by repairing a thin or damaged bladder lining. Elmiron is contraindicated in patients with known hypersensitivity to the drug, structurally related compounds, or excipients.

approved specifically by the FDA for the treatment of IC, the following medications have been useful for treating the condition. These include low-dose tricyclic antidepressants such as amitriptyline, based on their analgesic and sedative properties; anti-inflammatory agents; antispasmodics; antihistamines; muscle relaxants, and bladder analgesics.

# BLADDER INSTILLATIONS

**BLADDER DISTENTION:** The bladder is stretched by filling it with water under general anesthesia. This is part of the diagnostic procedure for IC, and may be therapeutic as well.

**DMSO** (dimethyl sulfoxide): This medication is instilled directly into the bladder. It is believed to work as an anti-inflammatory agent and therefore reduces pain. DMSO can be mixed with steroids, heparin, and/or local anesthetics to form a bladder "cocktail."

CYSTISTAT\* (hyaluronic acid): This medication is approved for use in Canada and Europe. It is not FDA-approved for use in IC in the US, however it can be obtained through Canada. It is thought to work by replacing the defective lining of the bladder.

OTHER BLADDER INSTILLATIONS: Heparin, Clorpactin\* WCS-90 (oxychlorosene sodium), Silver Nitrate. Heparin has both anti-inflammatory and surface protective actions. Clorpactin can be very painful and requires general anesthesia, although it has been used in diluted form in an office setting. Silver Nitrate is used infrequently and considered an outdated therapy.

## OTHER TREATMENTS

**DIET:** Eliminating certain foods (acidic, spicy) may decrease the severity of IC symptoms. Also, smoking, drinking coffee or tea, and alcoholic beverages may aggravate IC.

**SELF-HELP:** Self-help techniques can improve the quality of life and reduce the incidence and severity of flare-ups. These include changes in diet, stress reduction, visualization, biofeedback, bladder retraining and exercise, among others.

PHYSICAL THERAPY: The goal of physical therapy for IC patients is to relax the pelvic floor muscles and avoid overly stressing them. Many people with IC have problems with this group of muscles and develop a condition called pelvic floor dysfunction (PFD).

Treatment usually combines physical therapy, home exercise, medication, and self-care.

# SACRAL NERVE STIMULATION IMPLANTS:

These surgically implanted devices are approved for use in treating urinary incontinence, urgency, and frequency. They are not yet FDA-approved for treating IC pain, but are currently undergoing testing for this purpose.