Interstitial Cystitis

Oral medication

- **Tricyclic antidepressants** (e.g. amitriptyline) can relieve pain at doses much lower than those used to treat depression. They often cause bladder relaxation, increasing storage capacity and decreasing voiding frequency. Finally, their sedative effect is particularly helpful in reducing nighttime urination.
- Pentosan polysulfate (**Elmiron™**) is a medication used specifically for treating IC. Over time, it may restore and maintain the defective protective coating of the bladder lining. Elmiron™ must be used for several months before it becomes fully effective.
- **Antihistamines**, like hydroxyzine (e.g. **Atarax™**), may be helpful. They also have sedative and relaxing effects.
- In some cases, other classes of medication may be prescribed. These include anticonvulsants (e.g. gabapentin), anti-inflammatory drugs (e.g. ibuprofen), narcotic pain killers (e.g. codeine or oxycodone), bladder relaxants (e.g. tolterodine or oxybutinin), drugs to reduce urinary acidity, and others. New oral medications are being developed to help treat this challenging problem.

Bladder instillations

Some patients with IC may respond to medication placed directly into the bladder through a narrow tube passed through the urethra (bladder instillation). These medications may work by reducing inflammation or restoring the protective coating of the bladder lining. Medications administered by bladder instillation include:
- **DMSO** (**Rimso™**)
- Glycosaminoglycan (heparin or **Cystistat™**)
- Clorpactin (usually requiring administration under an anesthetic as it can be painful)

Your urologist may recommend various schedules of bladder instillations, often starting weekly and then decreasing in frequency.

Surgery

Cauterization of Hunner’s ulcers, when present at cystoscopy, may provide symptom relief.

As a last resort, surgery may be considered for the treatment of IC. This may involve bladder enlargement, removal or diversion of the urine away from the bladder into a new external or internal reservoir. These procedures may have serious complications and pain relief may not be reliable.

Research is underway with the aim of improving our understanding of IC and providing better treatment and cure.

IC is a painful, chronic condition of the bladder that is a challenge for physicians to diagnose and a challenge for patients to understand and bear. The symptoms may wax and wane over time, and in some cases may improve over a long period of time. Once diagnosed, you and your urologist can develop an individualized long term treatment plan to achieve and maintain symptom control.
Interstitial cystitis (IC) is a painful, chronic condition of the bladder. Its cause is poorly defined. It has been suggested that a defect in the bladder lining allows irritation from unknown substances in the urine.

Urine is produced by the kidneys, carried through the ureters and stored in the bladder until it is appropriate to empty through the urethra.

**Symptoms**

Symptoms of IC are variable in nature, timing and severity. They may include:

- Increased **frequency** of urination, both day and night,
- **Urgency**, the uncontrollable urge to urinate, often accompanied by increasing pelvic pain or pressure, and,
- Burning or aching **pain** in the pelvic area, including the bladder, urethra, vagina, testicles, scrotum or crotch. This pain is often worse before or after urination and, in some cases, with sexual intercourse.

Other symptoms may include general muscle aches and depressed mood. In some, IC may be associated with other chronic illnesses and pain conditions like fibromyalgia or irritable bowel syndrome.

The presence or absence of any of these symptoms does not make or rule out the diagnosis of IC.

**Diagnosis**

IC is diagnosed only after the exclusion of all other possibilities including UTI, sexually transmitted diseases, bladder cancer, and other disorders with similar symptoms.

Basic urine and blood tests are often normal. Visual inspection of the bladder (cystoscopy) may be helpful in ruling out other problems. A thin instrument is passed through the urethra into the bladder to allow inspection of its lining. Some patients have characteristic red patches in the bladder lining called Hunner’s ulcers.

In IC, gentle filling of the bladder with water at controlled pressure (hydrodistension) may cause pinpoint areas of bleeding (referred to as “glomerulations”) in its lining. This examination is performed under anaesthesia because such stretching would be very uncomfortable otherwise.

This stretching may also help relieve the symptoms of IC.

Establishing the diagnosis of IC is much like putting together the pieces of a puzzle – gradually the picture becomes clear as the pieces fall into place. The main pieces necessary to make a diagnosis of IC are the presence of typical symptoms, the absence of other conditions and the response to treatment.

This process of establishing a diagnosis requires patience. The symptoms of IC are real, not imagined. Once the diagnosis is clear, a comprehensive treatment plan will help relieve and control symptoms.

**Treatment**

The treatment of IC includes many components: patient education, self help, modification of diet and other external contributing factors, and often, medication. Surgery may be helpful in rare cases. Cure may not be possible, but relief can be achieved.

**Diet and self help**

- It may be helpful to avoid acidic and spicy foods, carbonated beverages and caffeine. Many other dietary factors may contribute to your symptoms. Finding them will require careful observation.
- Self-help measures, including exercise and learning relaxation techniques to reduce stress, may make your symptoms more tolerable.