# <u>Painful Bladder Syndrome</u> (<u>Interstitial Cystitis</u>)

### Painful bladder syndrome:

PBS is defined as a group of symptoms that include bladder pain and a frequent and/or urgent need to urinate during the day and/or night.

# **Interstitial Cystitis:**

IC is the diagnosis used to describe people who have symptoms of PBS as well as changes in the bladder lining (seen during cystoscopy).

It is difficult to know for sure how many people are affected by PBS/IC; estimates range from 0.01 to 11 percent of women and 0.04 to 5 percent of men.

# **Painful Bladder Causes:**

Little is known about the cause of PBS/IC. Many studies have shown that patients with IC have abnormalities in the lining of the bladder. However, it is not known if these bladder abnormalities are the cause of symptoms or if the abnormalities develop as a result of some unknown underlying disorder that also causes painful bladder symptoms.

It is likely that the nerves in the bladder become highly sensitive to pain and pressure as PBS/IC develops. Nerves outside the bladder, including nerves of the abdomen, pelvis, and hips, and legs, may also become more sensitive.

# One or more events may lead to the symptoms of PBS/IC, including:

- Urinary tract infection
- An episode of vaginitis or prostatitis (eg, a yeast infection of the vagina or a bacterial infection of the prostate)
- Bladder, pelvic, back, or other type of surgery
- Trauma (eg, fall onto the tailbone [coccyx] or car accident)

However, in many people, there is no clear explanation for why or how the symptoms of PBS/IC first began.

#### Painful Bladder Syndrome:

The symptoms of PBS/IC can vary from one person to another and from one episode to another. All patients with PBS/IC have bladder pain that is relieved at least partially by urinating. Symptoms usually include a frequent and urgent need to urinate during the day and/or night. Most, although not all, people with PBS/IC do not have urinary leakage (incontinence). Most people describe pain in the suprapubic area (in the lower abdomen, above the pubic bone) or urethral area. Some people describe one-sided lower abdominal pain or low back pain. The severity of pain ranges from mild burning to severe and debilitating pelvic pain.

Most people describe symptoms that begin gradually, with worsening discomfort, urgency, and frequency over a period of months. A smaller subset of patients describes symptoms that are severe from the beginning. When symptoms of PBS/IC begin suddenly, some patients are able to name the exact date on which symptoms began.

Some people have chronic pelvic pain that is distinct from bladder pain, sometimes with other pain symptoms. Some people have several pain-related diagnoses, such as irritable bowel syndrome, painful menstrual periods, endometriosis, vulvar pain (vulvodynia), or fibromyalgia. PBS/IC symptoms are sometimes at their worst during times when other pain symptoms are also at their worst.

Symptoms may vary from one day to the next. Worsening of PBS/IC symptoms may occur after consuming certain foods or drinks (eg, strawberries, oranges, beer, coffee), or during the luteal phase of the menstrual cycle (14 to 28 days after the first day of the last period), during stressful times, or after activities such as exercise, sexual intercourse, or being seated for long periods of time (eg, during a plane trip).

A person with severe disease may have to urinate several times per hour, which can seriously disrupt daily activities and sleep. As a result of these symptoms, home and work life are often disrupted, interest in sex may be minimal, and the person may have difficulty coping with chronic pain and fatigue. In surveys, 50 percent of patients reported being unable to work full-time, 75 percent described pain with intercourse, 70 percent reported sleep disturbance, and 90 percent reported that PBS/IC affected their daily activities.

# Painful Bladder Evaluation:

The diagnosis of PBS/IC is based upon a person's symptoms and examination. A careful medical history, physical examination, and sometimes laboratory testing are needed to confirm the diagnosis and also to be sure that another condition (eg, bladder infection or kidney stone) is not the cause of symptoms. There is no single test that can definitively diagnose PBS/IC.

# **Cystoscopy:**

Cystoscopy is a test that allows a doctor to examine the inside of the bladder. Cystoscopy is not required to diagnose PBS/IC, but may be recommended in certain situations. Cystoscopy can be done in the office, after a numbing gel is applied inside the urethra. It can also be done in an operating room while a patient is under anesthesia, sometimes in combination with other procedures.

To perform cystoscopy, a physician inserts a thin telescope with a camera through the urethra and into the bladder. The physician examines the inside (lining) of the bladder to determine if there are any abnormalities. A person with PBS/IC may have either a normal or abnormal-appearing bladder. If an abnormality is seen, further testing may be recommended.

# **Hydrodistension:**

Hydrodistension is a procedure that is sometimes recommended to diagnose interstitial cystitis. The procedure is done while a person is under anesthesia, after cystoscopy. The physician fills the patient's bladder with water to stretch the walls of the bladder. The water is released after a few minutes, and then filled again with a smaller amount of water. The lining of the bladder is then examined with a cystoscope to determine if there are signs of IC. Signs of IC can include glomerulations (small reddened areas) and Hunner's patches (larger red areas). Some patients with painful bladder symptoms can have a completely normal appearance during cystoscopy, however. A biopsy (small tissue sample) may be taken from any abnormal areas and later examined with a microscope.

There are conflicting opinions about the need for hydrodistension in the diagnosis of IC. Although some clinicians still perform hydrodistension, most clinicians believe is not necessary or helpful to see such evidence of IC before treating it.