In other forms of cystitis

By temporarily replacing and then restoring the protective layer in a patient's bladder wall, Cystistat has proven successful in aliviating pain and discomfort in interstitial cystitis, and in other forms of cystitis, such as radiation induced cystitis, the prevention of catheter acquired UTI and the prevention of recurrent bacterial cystitis.

Prevention of Recurrent Bacterial Cystitis

UTIs are among the most common bacterial infections, affecting women at a much higher frequency than men. Estimates suggest that about a third of women will have at least one episode of UTI requiring antibiotic treatment by the time they are 24 years old. Over a lifetime one half of women will have at least one UTI. There is also a high level of recurrence of UTI with a rate of about 25-35% within 3-6 months.
Studies in Europe using Cystistat for the prevention of UTIs have shown up to a five-fold increase in the infection-free period for women undergoing Cystistat therapy.

Relief from the Complications of Radiation

Radiation Induced Cystitis (RIC) is a side effect of radiation treatment for pelvic cancers, including bladder or prostate cancer as well as uterine, cervical or ovarian cancer. Patients with pelvic cancers may suffer radiation induced complications of adjacent organs, including the bladder. Symptoms include bladder inflammation, pain, minor to severe bleeding and an increased urgency to urinate. Symptoms may occur immediately after radiotherapy or may take up to ten years to appear. Studies have shown that Cystistat has an excellent rate of success in reducing radiation induced toxicity of the bladder in patients receiving radiotherapy.

Is patent protected and prescribed in more than 30 countries

Cystistat has been approved in over thirty countries around the world including most of the countries in Western Europe and Canada. To date, close to 50,000 patients have benefited from Cystistat treatment. Cystistat is patent protected in the USA, Canada and Europe.

Questions?

If you have questions or want to know more about Cystistat or cystitis, ask your physician or urologist or consult our website at www.cystistat.com or contact cystistat@bioniche.com

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visit our multilingual website:
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What is Painful Bladder Syndrome/ Interstitial Cystitis (PBS-IC)?

Painful Bladder Syndrome / Interstitial Cystitis (PBS-IC), one of the chronic pelvic pain disorders, is a condition resulting in recurring discomfort or pain in the bladder and the surrounding pelvic region. The disease, which is frequently misdiagnosed, has a significant negative impact on patients' general lifestyles with frequent need to urinate and chronic pain.

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What causes PBS-IC?

Its cause is unknown. Unlike "common" cystitis, which are caused by bacteria and are sensitive to antibiotics, PBS-IC is believed not to be caused by bacterial infection and does not respond to conventional antibiotic therapy.

What are the symptoms of PBS-IC?

The characteristic symptoms of PBS-IC are:

- **Frequency:** Day and/or night frequency of urination (up to over 40 times a day in severe cases). In early or very mild cases, frequency is sometimes the sole 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 PBS-IC may experience testicular, scrotal and/or perineal pain, and painful ejaculation.

How to diagnose PBS-IC?

Unfortunately, to date no commonly recognized specific diagnostic test exists. A diagnosis is usually based upon:

- Symptoms: urgency, frequency, or pelvic/bladder pain.
- Findings of Cystoscopy (examination of the inside of the bladder and other parts of the urinary system by means of an instrument).
- Exclusion of other bladder diseases (urinary tract infection UTI, tumor, tuberculosis, etc).

Diagnosing PBS-IC can be difficult for the physician and a long, frustrating experience for the patient. It is not uncommon that patients have to consult numerous doctors and specialists over a period of several years to obtain an accurate diagnosis.

Patients can be classified into two distinct categories. The great majority (90% - 95%) of patients are diagnosed with "early non-ulcerative" PBS-IC. Patients with "classic ulcerative" are believed to have the second, more severe PBS-IC, and may also have already reduced bladder capacities and stiffened bladder walls.

Why is it difficult to diagnose PBS-IC?

The diagnosis of PBS-IC is difficult for various reasons:

1. The origin of the syndrome has been controversial. It is only recently that the theory of deficiency in the bio-protective layer of the bladder is established and prevalent.
2. Different definitions and terminologies are being used: irritative bladder syndrome, urgency/frequency syndrome, pelvic pain syndrome, non-bacterial cystitis and so on.
3. Different diagnosis criteria exist.
4. PBS-IC can be easily confused with many different bladder diseases, such as an urinary tract infection (UTI), because the symptoms of frequency and urgency are common to most bladder conditions. It is almost normal for a female patient to be initially misdiagnosed with bacterial infection (cystitis). Men with PBS-IC symptoms are often misdiagnosed as prostatitis or bladder outlet obstruction patients.

Deficiency in the blood-urine barrier of the bladder

There is a protective layer of the bladder, so called glycosamionoglycan (GAG) layer, providing a bio-barrier against micro-organisms, carcinogens, crystals and other agents present in the urine. This bio-film on the inner surface of the bladder wall is identified as the primary defence mechanism in protecting the transitional epithelium (outmost layer of tissue or organ) from urinary irritants.

However, studies show that in PBS-IC patients this protective layer is deficient, allowing substances in the urine to penetrate the bladder wall and trigger PBS-IC symptoms.

Consequently, a great deal of research effort has been placed into the development of protective bladder coating such as Cystistat (sodium hyaluronate), which coats the bladder, restores the protective layer of the bladder and therefore reduces irritation.

How many people are suffering from PBS-IC?

- Approximately 16-500 per 100,000 of the female population.
- Approximately 90% of PBS-IC patients are women.
- The average age of onset is 40 years.
- A late deterioration of symptoms is unusual.
- 50% of PBS-IC patients have pain when travelling by car.
- Almost 2/3 of patients are unable to work full time.

Is diet important?

Reasonable amounts of fruit and vegetables are always important. Try to eliminate spicy foods from your diet. Information from studies show that the following foods and beverages increase the level of pain: alcohol, carbonated beverages, all foods containing caffeine (tea, coffee, chocolate etc), high acid foods and beverages (oranges, grapefruit, lemons and tomatoes), aged cheese, yogurt and pickles. Artificial sweeteners, sugar and aspirin are also known irritants.

Get on with Life

Cystistat contains sodium hyaluronate, which is the major component of the protective layer of the bladder. It is a solution that is instilled in a safe and simple procedure directly into the bladder. It acts as a temporary replacement for the defective GAG layer. Cystistat should only be administered by qualified medical personnel or patients who have received appropriate training.

Minimal side effects

As Cystistat is administered by intra-vesical instillation, it causes very few, if any, systemic side effects. Cystistat has been used in the treatment of several forms of cystitis with an excellent safety profile.

Get on with life.