

## VII. BLADDER PAIN SYNDROME

### Definition

Bladder Pain Syndrome (BPS): in the absence of a universally agreed definition, the International Society for the Study of Interstitial Cystitis – ESSIC definition is given (1).

ESSIC: Chronic pelvic pain, pressure or discomfort of greater than 6 months duration perceived to be related to the urinary bladder accompanied by at least one other urinary symptom like persistent desire to void or urinary frequency. Confusable diseases as the cause of the symptoms must be excluded.

There are no published data as to what duration of symptoms indicates that early spontaneous resolution of symptoms is unlikely. While ESSIC arbitrarily uses a 6 month duration, the American Urological Association Guideline suggests that a 6 week history is long enough to initiate diagnosis and treatment of BPS (2). Without further data, the Consultation cannot make a recommendation and believes that it is up to the discretion of the physician and patient as to the proper interval between symptom onset and evaluation and diagnosis of a chronic condition.

### 1. NOMENCLATURE

The scientific committee of the International Consultation voted to use the term “bladder pain syndrome” for the disorder that has been commonly referred to as interstitial cystitis (IC). The term painful bladder syndrome was dropped from the lexicon. The term IC implies an inflammation within the wall of the urinary bladder, involving gaps or spaces in the bladder tissue. This does not accurately describe the majority of patients with this syndrome. Painful Bladder Syndrome, as defined by the International Continence Society, is too restrictive for the clinical syndrome.

Properly defined, the term Bladder Pain Syndrome appears to fit in well with the taxonomy of the International Association for the Study of Pain (IASP) (see below), and focuses on the actual symptom complex rather than what appears to be long-held misconception of the underlying pathology.

Bladder Pain Syndrome (XXIII-2) (per IASP)

Bladder pain syndrome is the occurrence of persistent or recurrent pain perceived in the urinary bladder region, accompanied by at least one other symptom, such as

pain worsening with bladder filling and day-time and/or night-time urinary frequency. There is no proven infection or other obvious local pathology. Bladder pain syndrome is often associated with negative cognitive, and behavioural, sexual, or emotional consequences, as well as with symptoms suggestive of lower urinary tract and sexual dysfunction.

The Consultation believes that, based on the pathology and endoscopic finding characteristics of the Hunner lesion, the epidemiological pattern that distinguishes it from bladder pain syndrome, the clinical response to local treatment of the lesion by resection, fulguration, or steroid injection, the response to cyclosporine, and the

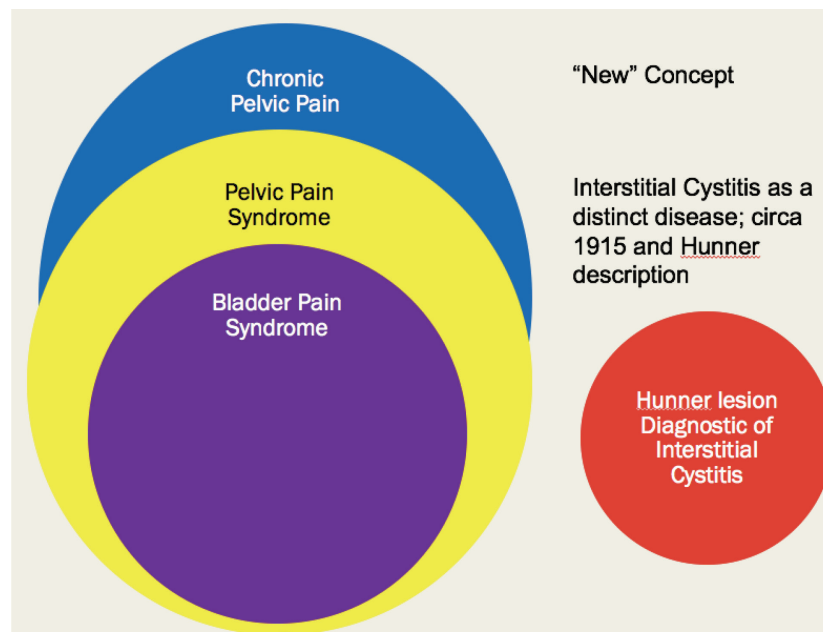


Figure 1

absence of reports in the literature that non-Hunner patients go on to develop Hunner lesions (ie, the finding of a Hunner lesion does not represent a continuum in the natural history of bladder pain syndrome), that the presence of a Hunner lesion should be considered a distinct disease. It therefore should drop out of the bladder pain syndrome construct, much like we do not consider other painful conditions like radiation cystitis, ketamine cystitis, or urinary tract infection a part of bladder pain syndrome.

The Consultation concludes that it would be reasonable to designate the Hunner lesion in symptomatic patients with the term “interstitial cystitis”, thus indicating a true interstitial inflammation. It would be defined much as Hunner defined it 100 years ago, and harmonise the largely Asian, European, and North American concepts of interstitial cystitis. The Consultation will continue to refer to the symptom complex as “bladder pain syndrome”. Hunner lesion will be considered a distinct phenotype, but in the future may be classified as a separate disorder entirely, albeit with local symptoms that are difficult to differentiate from bladder pain syndrome in the absence of endoscopy. In other words, we may be coming full circle in the historical perspective Figure 1.

## 2. HISTORY / INITIAL ASSESSMENT

Males or females whose symptoms meet the requirements of the definition of bladder pain syndrome should be evaluated. The presence of commonly associated disorders including irritable bowel syndrome, chronic fatigue syndrome, and fibromyalgia in the presence of the cardinal symptoms of bladder pain syndrome also suggests the diagnosis. Abnormal gynaecological findings in women and well-characterised, confusable diseases that may explain the symptoms must be ruled out.

The initial assessment consists of a bladder diary or frequency/volume chart, focused physical examination, urinalysis, and urine culture. In the absence of confusable disorders (uncomplicated disease), a diagnosis can be made and treatment instituted. Urine cytology, cystoscopy, and urodynamic evaluation are recommended if clinically indicated and/or the diagnosis is in doubt (complicated disease). Patients with urinary infection should be treated and reassessed. Those with recurrent urinary infection, abnormal urinary cytology, and microscopic or gross haematuria are evaluated with appropriate imaging and endoscopic procedures, and only if the findings are unable to explain the symptoms, are they diagnosed with BPS. GoR C

## 3. INITIAL TREATMENT

- Patient education, (GoR B)
- Dietary manipulation, (GoR B)
- Nonprescription analgesics,
- Stress reduction,
- Pelvic floor relaxation techniques comprise the initial treatment of BPS. In the patient with findings suggesting pelvic floor dysfunction, pelvic floor physical therapy with myofascial trigger point release and intravaginal Thiele massage is often an effective therapeutic intervention. The treatment of pain needs to be addressed directly, and in some instances referral to an anesthesia/pain centre can be an appropriate early step in conjunction with ongoing treatment of the syndrome. (GoR A)

When conservative therapy fails or symptoms are severe and conservative management is unlikely to succeed,

- Oral medication (GoR B) or
- Intravesical treatment can be prescribed. It is recommended to initiate a single form of therapy and observe results, adding other modalities or substituting other modalities as indicated by the degree of response or lack of response to treatment. (GoR B)

## 4. SECONDARY ASSESSMENT

If initial oral or intravesical therapy fails, or before beginning such therapy based on clinician judgment, it is reasonable to consider further evaluation which can include urodynamics, pelvic imaging, and cystoscopy with bladder distention and possible bladder biopsy under anaesthesia.

- Findings of detrusor overactivity suggest a trial of antimuscarinic or beta-3-agonist therapy.
- The presence of a Hunner lesion suggests therapy with transurethral resection, fulguration of the lesion, or direct steroid injection into the lesion. (GoR B)

- Bladder distention itself can have therapeutic benefit in 30-50% of patients, though benefits rarely persist for longer than a few months. (GoR C)

## 5. REFRACTORY BPS

Those patients with persistent, unacceptable symptoms despite oral and/or intravesical therapy are candidates for more aggressive treatment modalities. Many of these are best administered within the context of a clinical trial if possible. These may include

- Sacral nerve stimulation, (GoR B)
- Intradetrusor botulinum toxin, (GoR B)

- Oral cyclosporine A (GoR C), or
- Clinical trials of newly described pharmacological management techniques. At this point, most patients will benefit from the expertise of an anaesthesia pain clinic.

The last step in treatment is usually some type of surgical intervention aimed at increasing the functional capacity of the bladder or diverting the urinary stream.

- Urinary diversion with or without cystectomy has been used as a last resort with good results in selected patients. Cystectomy and urethrectomy do not appear to add any additional efficacy to diversion alone.

Augmentation or substitution cystoplasty seems less effective and more prone to recurrence of chronic pain in small reported series (GoR C)

# BLADDER PAIN SYNDROME

## SYMPTOMS

Pain, pressure or discomfort perceived to be related to the bladder with at least one other urinary symptom (e.g. frequency, nocturia)

## BASIC ASSESSMENT

History

- Bladder diary or frequency/volume chart
- Focused physical examination
- Urinalysis, culture

URINARY INFECTION

Test and reassess

## 1<sup>ST</sup> LINE RX

**“Uncomplicated BPS”**

Conservative Therapy

Stress reduction (B)

Patient education (B)

Dietary manipulation (B)

Nonprescription analgesics

Pelvic floor relaxation

Pelvic floor physical therapy (A)

Consult if associated disease

### “Complicated” BPS:

- Incontinence
- Urinary infection
- Haematuria
- Gynaecologic signs/symptoms

### Consider:

- Urine cytology
- Further imaging
- Endoscopy
- Urodynamics
- Laparoscopy

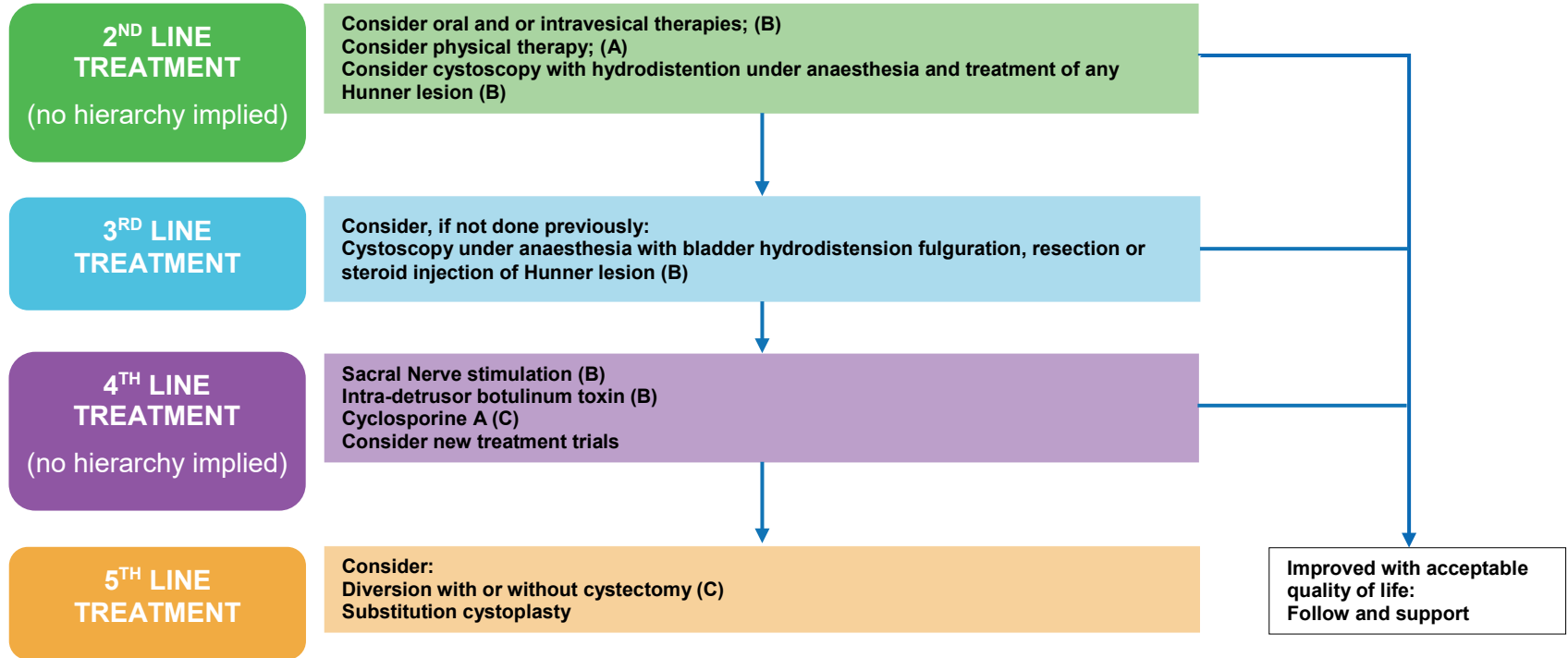
Normal

Abnormal

**TREAT AS INDICATED**

Consider CONTINENCE PRODUCTS for temporary support during treatment

## BPS REQUIRING MORE ACTIVE INTERVENTION



**Note: The only FDA approved therapies are DMSO and pentosan polysulfate.  
Consider CONTINENCE PRODUCTS for temporary support during treatment.**

- Pain management is a primary consideration at every step of the algorithm
- Patient enrollment in appropriate research trial is a reasonable option at any point
- Evidence supporting SNS, cyclosporine A, and botulinum toxin for BPS remains limited. These interventions are appropriate only for practitioners with experience in treating BPS and who are willing to provide long-term care post-intervention