

American Urological Association Approach to the Diagnosis and Management of IC/BPS

AMBER RANDEL

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The American Urological Association has published recommendations aimed at guiding physicians in recognizing interstitial cystitis/bladder pain syndrome (IC/BPS), conducting a valid diagnostic process, and treating patients by maximizing symptom control and minimizing adverse effects. The guideline defines IC/BPS as an unpleasant sensation perceived to be related to the urinary bladder that is associated with lower urinary tract symptoms of more than six weeks' duration, in the absence of infection or other unidentifiable causes.

Diagnosis

The basic assessment should include a history, physical examination, and laboratory analysis to document symptoms and signs of IC/BPS or that might rule out other disorders.

The history should include duration of symptoms; number of daily voids; sensation of urgency to void; and characteristics of pain, pressure, or discomfort. Men should be asked about dyspareunia, dysuria, and ejaculatory pain, and women should be asked about pain related to menstruation.

Abdominal and pelvic examinations should be performed to detect masses, tenderness, and hernias. A focused physical examination is important to rule out

infection or other possible causes of pain, such as vaginitis, urethritis, tender prostate, or urethral diverticulum. The pelvic floor muscles and pelvic support for the bladder, urethra, vagina, and rectum also should be evaluated. All patients should receive a brief neurologic examination to rule out an occult neurologic problem, as well as an evaluation for incomplete bladder emptying to rule out occult retention. A trial of antibiotics may be initiated if infection is suspected.

The basic laboratory evaluation includes urinalysis and urine culture. However, cytology may be considered in smokers or in those with untreated microhematuria because of the high risk of bladder cancer in smokers.

Voiding symptoms and pain levels should be obtained at baseline to help measure subsequent treatment effects.

A voiding log should be maintained for at least one day to be used to establish the characteristic low-volume frequency voiding pattern of IC/BPS. Self-report questionnaires also may be used to document baseline symptoms, although they are not sufficient for diagnosis. The isolated pain component focuses on the location, intensity, and characteristics of the pain or discomfort, as well as any factors that alleviate or exacerbate it. Several tools can be used to document pain, including symptom checklists, visual analog scales, and body maps. Other tests may support the diagnosis of IC/BPS, but have low specificity for the condition. In general, additional testing should be performed only if the results may affect treatment.

Cystoscopy and/or urodynamic testing should be considered when the diagnosis is in doubt, but the tests are not necessary to confirm an IC/BPS diagnosis in uncomplicated cases.

The roll of cystoscopy is to exclude conditions that may mimic IC/BPS and to identify a Hunner ulcer. Cystoscopy can be used to identify bladder cancer, vesical stones, urethral diverticula, and intravesical foreign bodies. Urodynamic evaluation may be indicated if there is suspicion of outlet obstruction, possible poor detrusor contractility, or other conditions that may make initial ►

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first-line therapy ineffective. There are no agreed-upon cystoscopy or urodynamic testing findings that are diagnostic of IC/BPS.

Treatment

More conservative treatment strategies should be used first, with less conservative strategies initiated if there is inadequate symptom control or irreversibility. Surgical treatments (other than fulguration of Hunner ulcers) usually are indicated only after all other treatment options have been ineffective or if a rare end-stage, small, fibrotic bladder is confirmed and the benefits of surgery outweigh the risks.

There are various treatments for IC/BPS. The choice depends on invasiveness; probability, duration, severity, and reversibility of adverse effects; and reversibility of the treatments themselves. However, the treatment strategy generally should proceed from more to less conservative.

Initial treatment choice and timing depend on symptom severity, physician judgment, and patient preference. It is important to educate patients about what to expect from treatment.

Tailoring IC/BPS treatment to symptom type and severity and making sure patients have reasonable expectations of treatment are necessary for effective management.

Concurrent treatments may be considered if it is in the best interest of the patient, although baseline assessments are essential to measure effectiveness.

Some patients may benefit from concurrent treatments, and this approach may be necessary to improve quality of life. Baseline symptom assessments are important for identifying ineffective treatments so that they can be discontinued.

Ineffective treatments should be discontinued after a clinically meaningful interval has elapsed.

Any treatment that is ineffective after a clinically meaningful period should be discontinued and alternative therapies considered.

Pain management should be continually assessed for effectiveness because of its importance to quality of life. Inadequate pain management should prompt consideration of multidisciplinary treatment and referral.

The underlying pathophysiology of IC/BPS is unclear; therefore, treatment focuses on symptom management. Optimizing quality of life, particularly through pain management, may require a multidisciplinary approach.

The IC/BPS diagnosis should be reconsidered if no improvement occurs after multiple treatment approaches.

If clinically meaningful trials of multiple treatments are ineffective, the diagnosis should be revisited including additional workup and possible referral.

FIRST-LINE THERAPIES

First-line treatment of IC/BPS should include patient education.

Patients should be educated about normal bladder function, that IC/BPS is not fully understood, about the benefits and risks of treatments, that no single treatment has been shown to be effective for most patients, and that acceptable symptom control may require trials of multiple treatment approaches before the optimal effect is achieved. The typical course of IC/BPS is chronic and includes symptom exacerbations and remissions.

Self-care practices and behavior modifications that can improve symptoms should be discussed and implemented as feasible.

Clinical experience and limited evidence suggest that modifying certain behaviors can improve IC/BPS symptoms in some patients. These modifications may include altering the concentration and/or volume of urine (with fluid restriction or additional hydration); application of local heat or cold over the bladder or perineum; avoiding common irritants (e.g., coffee, citrus products); using an elimination diet to determine which foods or drinks may contribute to symptoms; over-the-counter products (e.g., nutraceuticals, calcium glycerophosphates, phenazopyridine [Pyridium]); techniques applied to trigger points and areas of hypersensitivity (e.g., application of heat or cold); strategies to manage flare-ups (e.g., meditation, pelvic floor muscle relaxation, bladder training). Multidisciplinary assistance may be considered as appropriate to manage factors that appear to precipitate or exacerbate symptoms, such as irritable bowel syndrome, endometriosis, recurrent vaginitis or vestibulitis, flare-ups coinciding with menstrual cycle, panic attacks, and depression.

SECOND-LINE THERAPIES

Appropriate manual physical therapy techniques should be offered if appropriately trained professionals are available to perform them. Pelvic floor strengthening exercises should be avoided.

Tenderness and/or banding of the pelvic floor musculature is common with IC/BPS. Clinical experience and limited evidence suggest that manual physical therapy can relieve these symptoms; however, there is no evidence that pelvic floor strengthening (e.g., Kegel exercises) improves symptoms, and it may worsen the

condition. Appropriate manual physical therapy techniques include maneuvers that resolve pelvic, abdominal, or hip muscular trigger points, lengthen muscle contractures, and release painful scars and other connective tissue restriction. No quality studies have assessed massage or other relaxation techniques for IC/BPS, although these techniques have been effective for other forms of chronic pain and can be recommended for IC/BPS.

Multimodal pain management approaches (e.g., pharmacologic therapy, stress management, manual therapy) should be initiated.

Pain management is an integral part of IC/BPS treatment and should be assessed at each clinical encounter. Although little is known about effective pharmacologic treatment for chronic pain in IC/BPS, the approach should be similar to that for other chronic pain conditions. A multimodal approach in which agents are combined with other therapies is most likely to be effective, and patients should be aware that several regimens may need to be attempted before optimal pain control is achieved. Flare-ups may require a flexible pain treatment protocol. The goal of pharmacotherapy is to find a medication or combination of medications that provides significant pain relief with minimal adverse effects. Decisions regarding a multidisciplinary approach and referral should be made individually. Pain management does not constitute sufficient treatment of IC/BPS, and underlying bladder-related symptoms also should be treated.

Amitriptyline, cimetidine (Tagamet), hydroxyzine (Vistaril), or pentosan (Elmiron) may be considered as second-line oral medications.

Data show that amitriptyline significantly improves symptoms over placebo, although the drug has a substantial potential for adverse effects. Beginning at a low dose of amitriptyline (e.g., 25 mg) and titrating to 75 to 100 mg is an acceptable approach. Cimetidine has also been shown to significantly improve symptoms compared with placebo, without adverse effects. However, there is a lack of long-term follow-up data on a sufficient

number of patients, and cimetidine has the potential for drug interactions. The balance between benefits and risks of hydroxyzine is unclear; however, it has been effective in a subset of patients, and there are no serious adverse effects. Pentosan is the most studied oral medication for IC/BPS. Although high-quality studies show inconsistent results, there is some certainty that pentosan may benefit a subset of patients with IC/BPS.

Dimethyl sulfoxide, heparin, or lidocaine (Xylocaine) may be considered as second-line intravesical medications.

Although studies of dimethyl sulfoxide garnered a wide range of effectiveness and adverse effect rates, the therapy is an option for IC/BPS. Physicians should be aware that dimethyl sulfoxide potentially enhances absorption of other substances, and no study has assessed the safety of combining the therapy with other therapies versus using it alone. It appears that heparin, in combination with other therapies or used alone, may benefit a subset of patients with IC/BPS, and adverse effects are minimal. Without placebo-controlled trials, the balance between benefits and risks is unclear. Lidocaine appears to provide short-term relief, and adverse effects typically are not serious, but the procedure itself may be associated with pain.

TREATMENTS NOT RECOMMENDED FOR USE

Treatments with a lack of effectiveness and/or unacceptable adverse effects include long-term oral antibiotics; intravesical bacille Calmette-Guérin; intravesical resiniferatoxin; high-pressure, long-duration hydrodistention; and long-term oral glucocorticoids. ■

Answers to This Issue's CME Quiz

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| Q1. B | Q6. B, D | Q11. A, B, C, D |
| Q2. A, B | Q7. A | Q12. A, B, C, D |
| Q3. A, B, D | Q8. C | Q13. A |
| Q4. B | Q9. A, C | |
| Q5. C, D | Q10. D | |