

more common than once was thought; it is now being considered earlier in its course and is being diagnosed and managed more often by primary care clinicians. Results of physical examination, urinalysis, and urologic procedures are insensitive and/or nonspecific. Thus, diagnosis is based on the presence of appropriate symptoms and the exclusion of diseases with a similar presentation.

Three categories of disorders can be considered in the differential diagnosis of IC/BPS. The first comprises diseases that manifest as bladder pain (see above) or urinary symptoms. Among the latter diseases is *overactive bladder*, a chronic condition of women and men that presents as urgency and frequency and that can be distinguished from IC/BPS by the patient's history: pain is not a feature of overactive bladder, and its urgency arises from the need to avoid incontinence. Endometriosis is a special case: it can be asymptomatic or can cause pelvic pain, dysmenorrhea, and dyspareunia—i.e., types of pain that mimic IC/BPS. Endometrial implants on the bladder (although uncommon) can cause urinary symptoms, and the resulting syndrome can mimic IC/BPS. Even if endometriosis is identified, it is difficult in the absence of bladder implants to determine whether it is causative of or incidental to the symptoms of IC/BPS in a specific woman.

The second category of disorders encompasses the FSSs that can accompany IC/BPS. IC/BPS can be misdiagnosed as gynecologic chronic pelvic pain, irritable bowel syndrome, or fibromyalgia. The correct diagnosis may be entertained only when either changes of pain with altered bladder volume or urinary symptoms become more prominent.

The third category involves syndromes that IC/BPS mimics by way of its referred pain, such as vulvodynia and chronic urethral syndrome. Therefore, IC/BPS should be considered in the differential diagnosis of persistent or recurrent "urinary tract infection" (UTI) with sterile urine cultures; overactive bladder with pain; chronic pelvic pain, endometriosis, vulvodynia, or FSSs with urinary symptoms; and "chronic prostatitis." As mentioned above, important clues to the diagnosis of IC/BPS are pain that changes with bladder volume or with certain foods or drinks. Common among these are chilies, chocolate, citrus fruits, tomatoes, alcohol, caffeinated drinks, and carbonated beverages; full lists of common trigger foods are available at the websites cited in the treatment section below.

Cystoscopy under anesthesia formerly was thought to be necessary for the diagnosis of IC/BPS because of its capacity to reveal a Hunner's lesion or—in the 90% of patients without an ulcer—petechial hemorrhages after bladder distention. However, because Hunner's lesions are uncommon in IC/BPS and petechiae are nonspecific, cystoscopy is no longer necessary for diagnosis. Accordingly, the indications for urologic referral have evolved toward the need to rule out other diseases or to administer more advanced treatment.

A typical patient presents to the primary clinician after days, weeks, or months of pain, urgency, frequency, and/or nocturia. The presence of urinary nitrites, leukocytes, or uropathogenic bacteria should prompt treatment for UTI in women and chronic bacterial prostatitis in men. Persistence or recurrence of symptoms in the absence of bacteriuria should prompt a pelvic examination for women, an assay for serum prostate-specific antigen for men, and urine cytology and inclusion of IC/BPS in the differential diagnosis for both sexes.

In the diagnosis of IC/BPS, inquiries about pain, pressure, and discomfort are useful; IC/BPS should be considered if any of these sensations are noted in one or more anterior or posterior sites between the umbilicus and the upper thighs. Nondirective questions about the effect of bladder volume changes include "As your next urination approaches, does this pain get better, get worse, or stay the same?" and "After you urinate, does this pain get better, get worse, or stay the same?" Establishing that the pain is exacerbated by the consumption of certain foods and drinks not only supports the diagnosis of IC/BPS but also serves as the basis for one of the first steps in managing this syndrome. A nondirective way to ask about urgency is to describe it to the patient as a compelling urge to urinate that is difficult to postpone; follow-up questions can determine whether this urge is intended to relieve pain or prevent incontinence. To assess severity and provide quantitative baseline measures, pain and urgency should be estimated

by the patient on a scale of 0–10, with 0 being none and 10 the worst imaginable. Frequency per 24-h period should be determined and nocturia assessed as the number of times per night the patient is awakened by the need to urinate.

About half of patients with IC/BPS have intermittent or persistent microscopic hematuria; this manifestation and the need to exclude bladder stones or cancer require urologic or urogynecologic referral. Initiation of therapy for IC/BPS does not hamper subsequent urologic evaluation.

TREATMENT INTERSTITIAL CYSTITIS/BLADDER PAIN SYNDROME

The goal of therapy is to relieve the symptoms of IC/BPS; the challenge lies in the fact that no treatment is uniformly successful. However, most patients eventually obtain relief, generally with a multifaceted approach. The American Urological Association's guidelines for management of IC/BPS are an excellent resource. The correct strategy is to begin with conservative therapies and proceed to riskier measures only if necessary and under the supervision of a urologist or urogynecologist. Conservative tactics include education, stress reduction, dietary changes, medications, pelvic-floor physical therapy, and treatment of associated FSSs.

Months or even years may have passed since the onset of symptoms, and the patient's life may have been disrupted continually, with repeated medical visits provoking frustration and dismay in both patient and physician. In this circumstance, simply giving a name to the syndrome is beneficial. The physician should discuss the disease, the diagnostic and therapeutic strategies, and the prognosis with the patient and with the spouse and/or other pertinent family members, who may need to be made aware that although IC/BPS has no visible manifestations, the patient is undergoing substantial pain and suffering. This information is particularly important for sexual partners, as exacerbation of pain during and after intercourse is a common feature of IC/BPS. Because stress can worsen IC/BPS symptoms, stress reduction and active measures such as yoga or meditation exercises may be suggested. The Interstitial Cystitis Association (<http://www.ichelp.com>) and the Interstitial Cystitis Network (<http://www.ic-network.com>) can be useful in this educational process.

In constructing a benign diet, some of the many patients who identify particular foods and drinks that exacerbate their symptoms find it useful to exclude all possible offenders and add items back into the diet one at a time to confirm which ones worsen their symptoms. Patients also should experiment with fluid volumes; some find relief with less fluid, others with more.

The pelvic floor is often tender in IC/BPS patients. Two randomized controlled trials showed that weekly physical therapy directed at relaxation of the pelvic muscles yielded significantly more relief than a similar schedule of general body massage. This intervention can be initiated under the direction of a knowledgeable physical therapist who recognizes that the objective is to relax the pelvic floor, not to strengthen it.

Among oral medications, nonsteroidal anti-inflammatory drugs are commonly used but are controversial and often unsuccessful. Two randomized controlled trials showed that amitriptyline can diminish IC/BPS symptoms if an adequate dose (≥ 50 mg per night) can be given. This drug is used not for its antidepressant activity but because of its proven effects on neuropathic pain; however, it is not approved by the U.S. Food and Drug Administration for treatment of IC/BPS. An initial dose of 10 mg at bedtime is increased weekly up to 75 mg (or less if a lower dose adequately relieves symptoms). Side effects can be expected and include dry mouth, weight gain, sedation, and constipation. If this regimen does not control symptoms adequately, pentosan polysulfate, a semisynthetic polysaccharide, can be added at a dose of 100 mg three times a day. Its theoretical effect is to replenish a possibly defective glycosaminoglycan layer over the bladder mucosa; randomized controlled trials suggest only