The diagnosis of interstitial cystitis (IC) has always been a challenge to physicians in general and to urologists specifically. Since there is no specific diagnostic test such as an imaging study, blood work or urinary examination, a procedure that unequivocally establishes the diagnosis and no widely accepted etiology, it is incumbent on physicians to thoroughly evaluate the patient with this suspected disease process. This process is true not only for establishing the diagnosis and hopefully for deciding the treatment modality, but also for ruling out other diseases with which interstitial cystitis or painful bladder syndrome may be confused.

The first rule should be exclusion of those comorbidities that would preclude IC. These are specifically reviewed in the National Institutes of Health/National Institute of Diabetes and Digestive and Kidney Diseases criteria for interstitial cystitis. An accurate and thorough history will suffice to rule out at least half of the other diagnoses. A comprehensive physical examination (including a pelvic examination in women and a rectal examination in men) will also provide evidence to exclude some of these diagnoses, as will an expanded examination to discern areas of pain or tenderness.

A minimum of standardized instruments should be used to characterize not only the symptoms, but also the personal impact of these symptoms on the patient. A number of these tools are available and have been validated, the most commonly used being the O’Leary-Sant Interstitial Cystitis Symptom Index. In addition, assessment of pain characteristics should be included in this evaluation. Other instruments may be used that have more interest from a research perspective than one of direct patient care. The predominant concern in this process is that there is still no gold standard for the establishment of the diagnosis of IC and there is disagreement with respect to the validity of these tools in a disease that has a paucity of objective findings.

Laboratory evaluation for IC may be taken in different directions. Urinalysis and urine culture are critical in the diagnosis of other urinary disease entities but since no specific urinary findings exist for IC this step may only broaden or narrow further investigation. Urine culture will certainly rule out urinary tract infection and as an exclusion criterion for IC it is a critical step. Hematuria remains an important diagnostic point since it may or may not be present with this condition, and it does indicate that further testing may be necessary to exclude other disease processes with which IC may be mistaken including neoplasia. There is little agreement with respect to other methods of urinary testing and this issue should be relegated to research.

Blood tests also do not lend themselves to a diagnosis of IC. Inflammatory mediators may be detected but there is not enough consistency in the results that they can be used as definitive diagnostic tools. Serum immunological testing has also not been particularly helpful. There does seem to be a correlation in some patients with autoimmune diseases but specificity for the diagnosis of IC has not been demonstrated. Complete serum chemistry studies are appropriate since renal function, acid-base balance, state of hydration and hematological parameters should be assessed.

Imaging studies have also not proven helpful in the diagnosis of IC. However, it could be argued that these studies may be absolutely required to rule out those diseases with which IC may be confused. A finding of hematuria may guide the clinician in another direction and necessitate specific types of testing. However, considering there is enough confusion with this diagnosis pelvic and/or upper tract imaging studies will likely help in excluding other disease pathology as well as establish a baseline in patients with long-term pelvic pain. One of the overriding concerns in this disease is the natural tendency of medical science in general and clinicians in particular to label patients with certain diseases and thereby categorize them for the long term. This process can lead to an inadequate level of long-term care because over time other pathological conditions may develop in these patients. Thus, a followup regimen should be established so that the possibility of overlooking other diseases is minimized.

Evaluation for IC must also include cystoscopy. There is controversy regarding cystoscopy along with hydrodistention with the patient under anes-
thesia for bladder biopsy rather than under local anesthesia in the clinic. The finding of Hunner’s ulcers is diagnostic but petechial hemorrhage after hydrodistention may also lend credence to the diagnosis. Another test that has gained favor is the potassium sensitivity test.6

Two articles in this issue of The Journal address various aspects of this particular topic. Kim et al (page 2550) examined the use of urodynamic testing in patients with painful bladder syndrome/interstitial cystitis and idiopathic overactive bladder. Since one of the obfuscating diagnoses for IC is overactive bladder they characterized patients with overactive bladder and those with interstitial cystitis as having different urodynamic findings. Interestingly in their study and in others incontinence was not seen with IC except for the occasional case of stress incontinence. Urgency incontinence is also not as common as one would intuitively believe. The authors also found that patients with interstitial cystitis had a lower capacity in all parameters during filing cystometry. This finding is important but will not necessarily help distinguish between the diagnoses of IC and overactive bladder.

Also in this issue Nickel et al (page 2555) examined the circumstances of sleep disturbances measured by the Medical Outcomes Study Sleep scale and the Medical Outcomes Study 12-Item Short Form Health Survey. They found that sleep disturbance is a previously unaddressed component of IC. They also demonstrated that nocturia was common with IC but not as a distinction from the diagnosis of overactive bladder.

In the final analysis it is obligatory for the physician to accurately diagnose this disease and rule out conflicting disease pathology.7,8 Since to our knowledge there is no test to absolutely diagnose IC it may be that all we accomplish in the evaluation process is to rule out other diseases.

**REFERENCES**


