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Managing chronic prostatitis: A modern approach

Modern evaluation, treatment will help many men
with nonbacterial chronic pelvic pain

Hands On



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Nearly one in 10 men who walk into the outpatient office of a urologist leave with a coded diagnosis of prostatitis. Urologists have described the traditional approach to the diagnosis and management of the chronic prostatitis syndromes as one of the most frustrating areas of urologic practice. Urologists have no problem with the 5% to 10% of patients with a clear diagnosis of acute bacterial prostatitis (acute bacterial infection of the lower urinary tract and prostate) and chronic bacterial prostatitis (recurrent urinary tract infections, usually with the same organism whose nidus resides in the prostate gland).

By contrast, urologists have great difficulty managing the vast majority of patients who present with genitourinary pain and voiding symptoms that are not associated with a clearly defined infection of the lower urinary tract or prostate.

There is light at the end of the tunnel for the practicing urologist. In fact, developments in the field are evolving so quickly, particularly over the last 3 years, that it is difficult for clinicians to keep up. North American and international consensus meetings have established definitions, classification systems, symptom indices, and diagnostic algorithms aimed at improving our diagnosis of chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS). Numerous randomized, placebo-controlled trials are begin-

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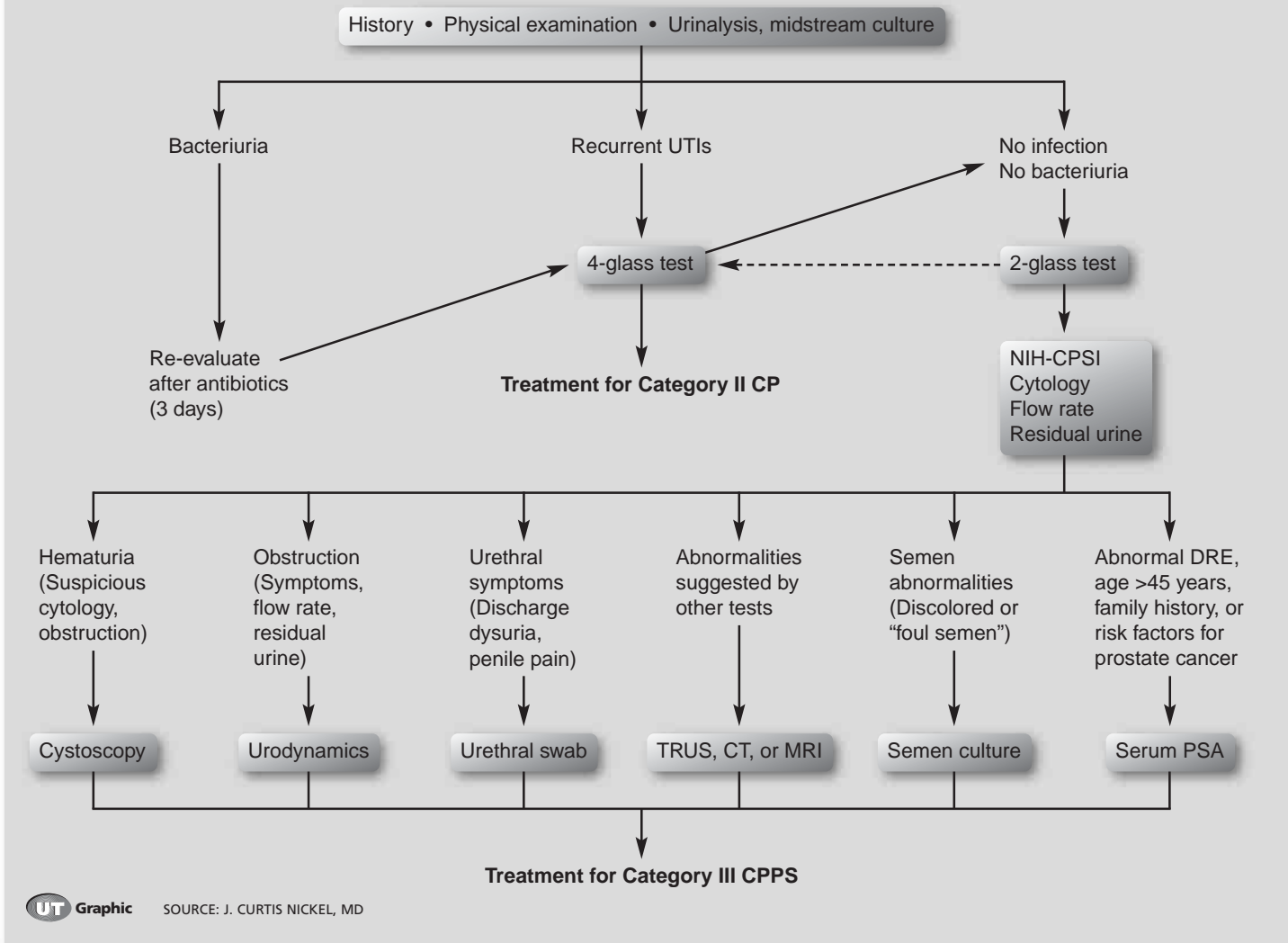
ning to provide a solid evidence-based approach to the treatment of the condition once it has been diagnosed, classified, and evaluated in a specific patient.

This article provides a stepwise approach to the evaluation and treatment of this condition, based on current evidence.

Classification/evaluation

Patients with chronic genitourinary pain (perineal, suprapubic, penile, ejaculatory, etc.) associated with variable obstructive and irritative voiding symptoms and sexual dysfunction, and without a history of recurrent urinary tract infection and/or demonstration of uropathogenic bacteria localized to the prostate gland, are now classified as having category III CP/CPPS (*JAMA* 1999; 282:236-7). Category III has been divided into an inflammatory subtype (category IIIA, similar to "chronic nonbacterial pro-

Figure 1. Evaluation of a patient with chronic prostatitis/chronic pelvic pain syndrome



statis”); and a non-inflammatory subtype (IIIB, similar to “prostatodynia”). These sub-classifications are based on the degree of inflammation, determined by counting the number of leukocytes in prostate-specific specimens. Recent studies, however, have not validated the differentiation of category IIIA and IIIB, either for diagnosis or treatment effects.

A National Institute of Diabetes and Digestive Kidney Diseases symposium held in 2002 developed recommendations (actually suggestions) for the evaluation of patients presenting with CP/CPSP (*Urology* 2003; 60[Suppl 6A]:20-3). A suggestion of the symposium was that various aspects of the evaluation should be categorized as mandatory, recommended, or optional, as follows (figure 1).

Mandatory. A history, physical exami-

nation, and urinalysis/urine culture are considered mandatory for the evaluation of all patients presenting with CP/CPSP.

Recommended. Recent studies have provided little evidence that the results provided by lower urinary tract localization testing (the Meares-Stamey four-glass test) change management in the majority of patients (*Ann Intern Med* 2000; 133:367-81; *J Urol* 2002; 167[Suppl]:24[Abs 96]). Localizing cultures for uropathogenic bacteria may suggest a possible bacterial cause for the pain and discomfort. Therefore, localization studies are now considered recommended rather than mandatory. (Consider the simpler pre- and post-massage screen [*Tech Urol* 1997; 3:38-43].)

The National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI), as shown in figure 2, has

established its value for the initial evaluation and follow-up of patients being treated for CP/CPSP, both in scientific studies and clinical practice (*J Urol* 1999; 162:369-75; *Urology* 2002; 59:870-6; *J Urol* 2003; 169:580-3). Residual urine determination and urine cytology are also considered recommended evaluations.

Optional. Optional evaluations are not required in the majority of patients. However, findings on the history, physical examination, and mandatory and/or recommended evaluations will indicate which of these optional investigations may be required in an individual patient. Such investigations may include semen analysis/culture, urethral swab for culture, pressure-flow studies, video urodynamics, cystoscopy, transrectal ultrasound, pelvic imaging, and PSA.

Treatment strategy

Once a patient has been diagnosed, the category of CPPS determined, and the patient evaluated as described above, the urologist must decide on a reasonable therapeutic strategy (figure 3). It was not long ago that the only treatment suggested for patients with uropathogenic bacteria (chronic bacterial prostatitis) was long-term antibiotic therapy. The vast majority of patients with a nonbacterial etiology were ignored. That is not the case today.

The most common treatments used by urologists for patients with CP/CPPS are antibiotics, alpha-blockers, anti-inflammatory agents, and phytotherapeutic treatments. Other prostate- and bladder-related treatments such as pentosan polysulfate sodium (Elmiron), finasteride (Proscar), transurethral thermotherapy, and neuromodulatory treatments (acupuncture, sacral nerve stimulation, etc.) are now being used to ameliorate symptoms in patients with CP/CPPS. Evidence is quickly accumulating that will allow urologists to decide on appropriate treatment for patients with CP/CPPS (*Ann Intern Med* 2000; 133:367-81; Nickel JC: Prostatitis and related conditions. In: Walsh P et al, eds. "Campbell's Urology," 8th ed. Philadelphia, WB Saunders Co., 2002, 603-30).

Until recently, no large, well-designed, prospective placebo-controlled trials have evaluated the use of antibiotics, the most common treatment modality used for CP/CPPS. Many urologists strongly believe that antibiotic therapy is not only indicated but also helpful in many patients who initially present with CP/CPPS, especially those with a very short history. However, evidence is accumulating that antimicrobial therapy may be ineffective in patients who have suffered from CP/CPPS for a longer duration of time, especially those who have had the disease for years (data to be presented at the 2003 AUA annual meeting).

Similarly, urologists anecdotally believe that alpha-blockers help many patients with CP/CPPS, especially the voiding symptoms and pain associated with the condition. Studies from the 2002 and 2003 AUA annual meetings show that alpha-blockers do not ameliorate the symptoms associated with CP/CPPS as quickly as they do in men with lower urinary tract symptoms associated with BPH. In this condition, especially for

Recent evidence has shown very little relationship between inflammation and pain in CP/CPPS, indicating that other factors may be responsible for symptoms.

the chronic patient, studies show that a long duration of alpha-blocker therapy will be necessary before any significant clinical effect is seen. Six weeks appears to be the minimum duration of therapy, but it is more

likely that response will not be identified until 3 months (*J Urol* 2003; 169:592-6).

Anti-inflammatory drugs (either over-the-counter agents or prescription agents such as COX-2 inhibitors) are becoming

Figure 2. NIH Chronic Prostatitis Symptom Index (NIH-CPSI)

Pain or Discomfort

1. In the last week, have you experienced any pain or discomfort in the following areas?
- | | Yes | No |
|--|----------------------------|----------------------------|
| a. Area between rectum and testicles (perineum) | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| b. Testicles | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| c. Tip of the penis (not related to urination) | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| d. Below your waist, in your pubic or bladder area | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |

2. In the last week, have you experienced:

- | | Yes | No |
|--|----------------------------|----------------------------|
| a. Pain or burning during urination? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |
| b. Pain or discomfort during or after sexual climax (ejaculation)? | <input type="checkbox"/> 1 | <input type="checkbox"/> 0 |

3. How often have you had pain or discomfort in any of these areas over the last week?

- 0 Never
 1 Rarely
 2 Sometimes
 3 Often
 4 Usually
 5 Always

4. Which number best describes your AVERAGE pain or discomfort on the days that you had it, over the last week?

- 0 1 2 3 4 5 6 7 8 9 10
NO PAIN AS
PAIN BAD AS
YOU CAN
IMAGINE

Urination

5. How often have you had a sensation of not emptying your bladder completely after you finished urinating, over the last week?
- 0 Not at all
 1 Less than 1 time in 5
 2 Less than half the time
 3 About half the time
 4 More than half the time
 5 Almost always

6. How often have you had to urinate again less than two hours after you finished urinating, over the last week?

- 0 Not at all
 1 Less than 1 time in 5
 2 Less than half the time
 3 About half the time
 4 More than half the time
 5 Almost always

Impact of Symptoms

7. How much have your symptoms kept you from doing the kinds of things you would usually do, over the last week?

- 0 None
 1 Only a little
 2 Some
 3 A lot

8. How much did you think about your symptoms, over the last week?

- 0 None
 1 Only a little
 2 Some
 3 A lot

Quality of Life

9. If you were to spend the rest of your life with your symptoms just the way they have been during the last week, how would you feel about that?

- 0 Delighted
 1 Pleased
 2 Mostly satisfied
 3 Mixed (about equally satisfied and dissatisfied)
 4 Mostly dissatisfied
 5 Unhappy
 6 Terrible

Scoring the NIH-Chronic Prostatitis Symptom Index Domains

Pain: Total of items 1a, 1b, 1c, 1d, 2a, 2b, 3, and 4 = _____

Urinary Symptoms: Total of items 5 and 6 = _____

Quality of Life Impact: Total of items 7, 8, and 9 = _____



The National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI) captures the three most important domains of the prostatitis experience: pain, voiding, and quality of life. The index has been found useful in research studies and clinical practice. (Adapted from *J Urol* 1999; 162:369-75)

more popular, especially because prostatitis has been perceived to be an inflammatory, pain-related syndrome. Recent evidence has shown very little relationship between inflammation and pain in CP/CPPS, indicating that other factors may be responsible for symptoms.

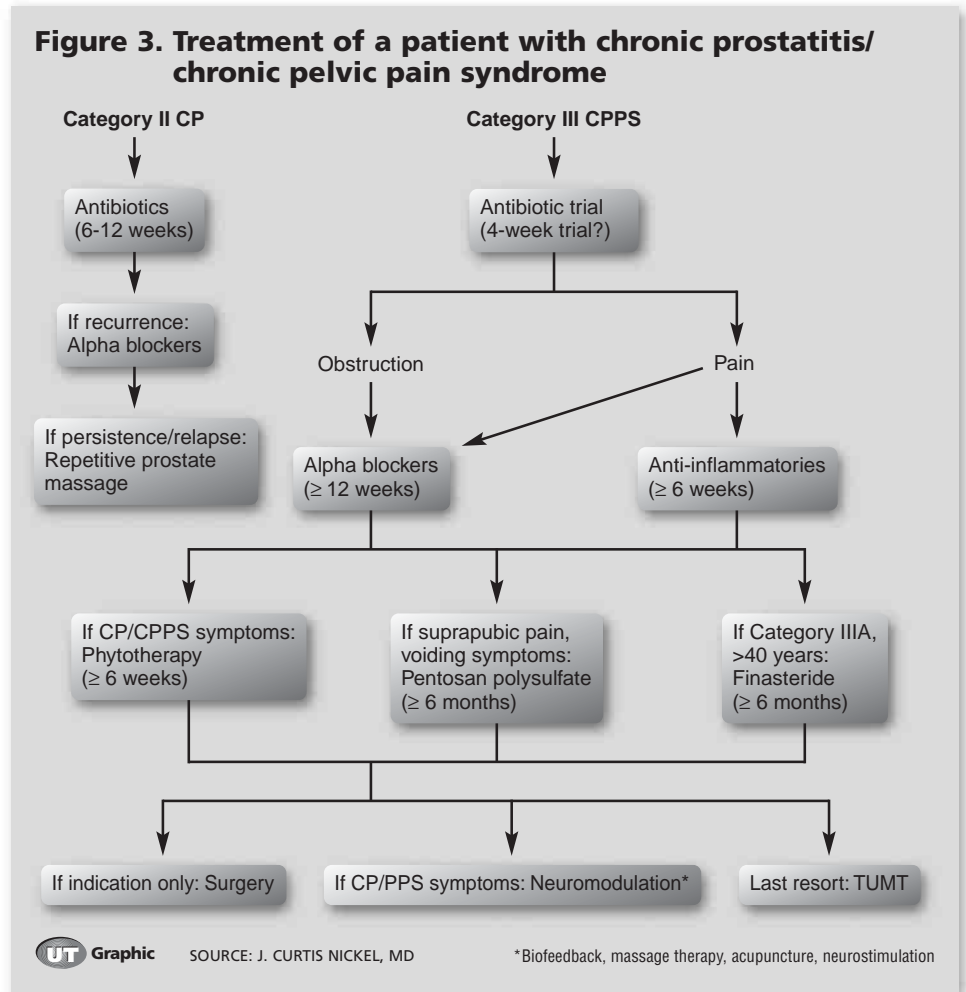
However, many patients experience modest relief of pain and symptoms of CP/CPPS with anti-inflammatory agents.

Evidence is accumulating that antimicrobial therapy may be ineffective in patients who have suffered from CP/CPPS for a longer duration of time.

COX-2 inhibitor therapy does demonstrate modest efficacy compared with placebo following 6 weeks of high-dose therapy (*J Urol* 2003; in press).

On direct questioning, many men with CP/CPPS will volunteer that they are taking at least one, and usually many, herbal medications and supplements advertised for prostate problems. These include saw palmetto, pygeum africanum, beta-sitosterol, zinc supplements, pollen extracts, and quercetin preparations. At this time, only quercetin (Prosta-Q) has been shown to be more effective in small clinical trials compared with placebo (*Urology* 1999; 34:960-3). Phytotherapeutic agents are not regulated, and both the physician and patient must be sure that a product comes from a reputable source.

Randomized, placebo-controlled trials have also shown modest efficacy (compared with placebo) with pentosan polysulfate, hormonal therapy (finasteride), and heat therapy (specifically transurethral microwave thermotherapy). However, all of these modalities need to be further eval-



uated in larger randomized, multicenter, placebo-controlled trials before they can be recommended as monotherapy for patients with CP/CPPS.

Numerous studies are presently being planned to evaluate other potential avenues of treatment for which small clinical trials have suggested efficacy. These treatments include acupuncture, biofeedback, specific physiotherapies, neuromodulation using the InterStim device (Medtronic, Minneapolis), immune modulation (etanercept [Enbrel]), transurethral thermotherapy, and other modalities of heat therapy.

Conclusion

The management of chronic prostatitis has been a rapidly evolving field over the last 5

to 10 years. Epidemiologic studies have identified CP/CPPS as a real medical problem. The distressing quality of life experienced by patients diagnosed with the condition and its associated health and socioeconomic costs have led to a surge in research funding that is helping to support a new generation of committed prostatitis researchers. Urologists and their patients can expect more evidence-based options for the management of CP/CPPS in the very near future. **UT**

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