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FPIN's Clinical Inquiries

Treatments for Chronic Prostatitis

Clinical Question

What is the best treatment for chronic nonbacterial prostatitis?

Evidence-Based Answer

Because the etiology of chronic nonbacterial prostatitis is unknown, a variety of treatments have been proposed. The best-designed, largest clinical trials have not found the most commonly used therapies (i.e., alpha blockers, quinolone antibiotics, nonsteroidal anti-inflammatory drugs, finasteride [Propecia]) to be effective. [Strength of recommendation: B, randomized controlled trials (RCTs)]

Allopurinol (Zyloprim), phytochemicals, and transurethral thermotherapy have been suggested as treatment options, but evidence of their effectiveness is lacking. [Strength of recommendation: B, expert opinion or inconclusive trials]

Evidence Summary

The National Institutes of Health (NIH) developed a new classification for prostatitis in 1995 (Table 11). This standardized the inclusion criteria for clinical trials of chronic nonbacterial prostatitis and prostadynia.1 It is estimated that patients with nonbacterial prostatitis constitute 90 percent of all cases of prostatitis.2 Outcome measurement was standardized by the development of the NIH Chronic Prostatitis Symptom Index (NIH-CPSI), a validated symptom score.3

Table 1

NIH Classification of Prostatitis

Category	Symptoms
I. Acute infection of the prostate gland	Acute febrile illness associated with perineal and suprapubic pain, dysuria, and obstructive voiding symptoms
II. Chronic infection of the prostate gland	Recurrent urinary tract infections with pain and voiding disturbances
III. Chronic genitourinary pain in the	Chronic perineal, suprapubic, testicular,

absence of uropathogenic bacteria localized to the prostate gland employing standard methodology	penile, or ejaculatory pain associated with variable dysuria and obstruction and irritative voiding symptoms
IIIa. Significant number of white blood cells in expressed prostatic secretions, postprostatic massage urine sediment, or semen	See category III
IIIb. Insignificant number of white blood cells in expressed prostatic secretions, postprostatic massage urine sediment, or semen	See category III
IV. White blood cells (or bacteria) in expressed prostatic secretions, postprostatic massage urine sediment, semen, or histologic specimens of prostate gland	Asymptomatic

NIH = National Institutes of Health.

Information from reference 1.

The Cochrane systematic review of interventions for chronic nonbacterial prostatitis concluded that the use of alpha blockers or antibiotics is not supported by the current evidence.4 The studies identified had few participants; used inconsistent or nonvalidated outcome measures; and, although statistically significant improvements were sometimes seen, their clinical significance is uncertain.

Alpha blockers and quinolone antibiotics were shown to be ineffective by a larger, more recent, and better-designed RCT of 196 men with chronic nonbacterial prostatitis.5 These results are consistent with a well-designed study6 of 80 men that showed no significant symptomatic improvement after six weeks of treatment with levofloxacin (Levaquin). Neither of these more recent, higher-quality RCTs5,6 was included in the Cochrane review, but they strengthened the recommendation against routinely using alpha blockers or antibiotics for this problem.

A single RCT with 161 patients found no benefit from Rofecoxib (Vioxx).7 Two studies evaluated finasteride.8,9 The earlier of these two studies was flawed because the treatment group and control group were different at baseline, making posttreatment comparisons invalid.8 This study also did not use a validated symptom score, making it difficult to compare with other studies. A more recent and larger RCT9 of finasteride versus placebo showed no difference between the two.

A systematic review10 identified only one small RCT11 of limited quality that evaluated allopurinol in 54 patients. It found a small symptomatic benefit; however, the limitations in the study design do not allow allopurinol to be routinely recommended for this condition.10 Similarly, quercetin12 and pentosan [Elmiron]13 are phytochemicals that have been evaluated

for the treatment of chronic nonbacterial prostatitis, but the studies were small and the results inconclusive.

A variety of transurethral or transrectal heat treatments have been tried, but the studies were small and the potential side effects (e.g., hematuria, erectile dysfunction, premature ejaculation, urinary retention, urinary tract infection, urinary incontinence) limited the utility of these therapies.14 Only one small study with 10 patients15 used a validated outcome measure and sham therapy for the control group. Although the authors were encouraged by the possibility of an effective treatment, they acknowledged that larger confirmatory trials were necessary.

Recommendations from Others

There were no U.S. guidelines for the treatment of chronic prostatitis found in the National Guideline Clearinghouse. A 2001 British Association for Sexual Health and HIV guideline16 for treating chronic nonbacterial prostatitis stated that "there are no universally effective treatments for chronic abacterial prostatitis/chronic pelvic pain syndrome. The lack of knowledge of the etiology of these conditions means that no specific recommendations can be made and treatment choice is usually trial and error." The American Urological Association has no guideline related to prostatitis listed on its Web site.

Clinical Commentary

The etiology of chronic nonbacterial prostatitis is unknown. Because there may be multiple etiologies, it will be hard for any single therapy to have an effect large enough to demonstrate effectiveness in clinical trials. Taking a patient history may provide physicians with clues as to where to start, and also decrease patient anxiety about the condition. Encouraging patients to notice aggravating and alleviating factors will help them gain a sense of control. Individual therapeutic trials of relatively safe drugs such as alpha blockers or allopurinol may be a reasonable option, with the patient keeping a symptom diary to evaluate effectiveness.

JAMES MEZA, M.D., M.S.A.

SHAH ALAM, M.D.

Henry Ford Hospital
Detroit, Michigan

SANDRA MARTIN, M.L.S.

Wayne State University
Detroit, Michigan

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Address correspondence by e-mail to James Meza, M.D., M.S.A., at jmeza1@hfhs.org. Reprints are not available from the authors.

Clinical Inquiries provides answers to questions submitted by practicing family physicians to the Family Physicians Inquiries Network (FPIN). Members of the network select questions based on their relevance to family medicine. Answers are drawn from an approved set of evidence-based resources and undergo peer review. The strength of recommendations and the level of evidence for individual studies are rated using criteria developed by the Evidence-Based Medicine Working Group (http://www.cebm.net/levels_of_evidence.asp).

This series of Clinical Inquiries is coordinated for American Family Physician by John Epling, M.D., State University of New York Upstate Medical University, Syracuse, N.Y. The complete database of evidence-based questions and answers is copyrighted by FPIN. If you are interested in submitting questions to be answered or writing answers for this series, go to http://www.fpin.org or contact questions@fpin.org.

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