

Inflammation, infection are not sole causes of CPPS

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Chicago—Neither inflammation nor bacterial infection correlates with symptom severity in chronic prostatitis/chronic pelvic pain syndrome (CPPS), raising questions about the wisdom of routine use of anti-inflammatories and antibiotics in patients



Dr. Schaeffer

with the condition, suggest findings from an ongoing National Institutes of Health cohort study.

More than half the cohort demonstrated evidence of urethral inflammation, and half had 5+ leukocyte counts in expressed prostatic secretion. However, overall symptom score and symptom subscale scores did not correlate with the presence of inflammation or bacteria.

“The symptoms patients presented with did not correlate with the number of white cells or the number of bacteria,” said Anthony J. Schaeffer, MD, chairman of urology, Northwestern University, Chicago. “A negativist would be inclined to say there is no reason to look for these things in patients. Our position is that there are inflammatory cells and bacteria that cause symptoms in these men, but clearly, other factors are responsible.”

Defining inflammation

The study involved 278 patients in the NIH Chronic Prostatitis Cohort, which encompasses six centers in the United States and Canada. The aim of the investigation is to identify characteristics associated with chronic prostatitis, Dr. Schaeffer said during

an AUA meeting presentation.

Symptoms were assessed by means of the NIH Chronic Prostatitis Symptom Index (CPSI), which includes subscales for pain and discomfort, urinary symptoms, and quality of life. Urethral inflammation was defined in several ways. The most conservative definition was a 1+ white cell count in the first voided urine. Investigators also evaluated leukocyte cut points of 1+, 5+, and 10+ in EPS, post-EPS voided urine, and semen.

By the most conservative criterion, 156 men (56%) had urethral inflammation. With respect to more conventional definitions, 115 (51%) of the patients had urethral inflammation as defined by a 5+ leukocyte count in EPS, and 95 (34%) met the definition of 10+ leukocytes in EPS, Dr. Schaeffer reported.

Localization of bacteria was classified in two ways. The most stringent definition characterized localization as absence of bacteria in the first voided urine and mid-stream void but present in EPS, post-EPS voided urine, or semen. A second definition was limited to presence of bacteria in EPS.

Pathogen localization

Overall, 20 patients (7.2%) met at least one definition for localization of pathogens; 14 of the 20 met the more stringent of the two definitions. Of the 20 total patients, five had uropathogens that localized to EPS or post-EPS voided urine, 13 to semen alone,

and two that had localization to both EPS and semen. For the entire cohort, 12 patients exhibited no bacterial growth, three had only uropathogens, 212 had non-uropathogens, and 51 had a mix of uropathogens and non-uropathogens.

A comparison of CPSI scores with the various definitions of urethral inflammation showed no correlations between symptom severity and inflammation. The lack of correlation held for the total CPSI score and for the subscale scores.

Similarly, the presence of bacteria did not correlate with symptom scores. Dr. Schaeffer and colleagues found no associations between symptoms and any of the four bacterial subgroups (no growth, uropathogens, non-uropathogens, and mixed) or the collective bacterial categories. Neither the total CPSI score nor any of the subscale scores had an association with the presence of bacteria.

Prostate not always the source

The findings have implications for current approaches to treatment of chronic prostatitis/CPPS, as investigators noted that antimicrobial and anti-inflammatory therapy is routine for many patients.

Dr. Schaeffer encouraged urologists to take a broader view of the clinical entity that is frequently characterized as chronic prostatitis.

“The real take-home message in these findings is that we are dealing with a chronic pelvic pain syndrome,” said Dr. Schaeffer. “It is an oversimplification to assume that the prostate is the cause of all these men’s problems. Some of these men probably have symptoms related to prostatic inflammation or bacteria, but others’ symptoms are related to other factors and problems.”**UT**

At a Glance

No correlation ► The symptom scores and severity of chronic pelvic pain syndrome do not appear to correlate with either the presence of inflammation or bacterial infection.