Studies Few But Hopeful at 2011 AUA Meeting

With only nine study presentations related to chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) and no courses devoted specifically to it, last May’s American Urological Association (AUA) meeting could have been a disappointment. But there was news about potentially helpful treatments and two stood out enough to be included in AUA’s press conference on pelvic pain. Those were an alpha blocker that may work better than those studied in the past for CP/CPPS and a device that allows do-it-yourself internal trigger-point massage. Two of the studies aimed at explaining the risks of CP/CPPS and its related conditions brought home the message that men with CP/CPPS need to focus on their cardiovascular health.

TREATMENT

Selective Alpha Blocker Cuts Symptoms, Improves Quality of Life

Effects of silodosin in men with moderate or severe chronic prostatitis/chronic pelvic pain syndrome: a double-blind, placebo-controlled phase 2 study
J. Curtis Nickel, Michael O'Leary, Herbert Lepor, Kim Caramelli, Heather Thomas, Lawrence A. Hill, Gary Hoel, Kingston, Canada

This large trial showed positive effects and best results with the dosage 4 mg/day for men with CP/CPPS. The trial tested the dosages 4 mg/day and 8 mg/day of the newer alpha blocker, silodosin (Rapaflo), which is already FDA approved for benign prostatic hypertrophy (BPH), in men with CP/CPPS who had had symptoms for at least three months, NIH Chronic Prostatitis Symptom Index (CPSI) scores of at least 15, and pain scores of at least 8. Different groups took either dosage or placebo for 12 weeks. For the men taking the 4 mg/day dosage, there were significant improvements in the total CPSI score (12 out of 37,) in the total urinary (2 out of 10) and quality of life impact (4 out of 6) CPSI subscores, and the physical component subscore on the Medical Outcomes Study Short Form 12 (SF-12). Significantly more men (56 percent) had an improvement of 6 or better on a 10 point scale assessing their overall response, compared with those who took placebo (29 percent).

Device Aids At-Home Internal Trigger Point Massage

Safety and effectiveness of an internal pelvic myofascial trigger point wand for urological chronic pelvic pain syndromes
Rodney Anderson, David Wise, Timothy Sawyer, Brian Nathanson, Stanford, CA

Physical therapy for pelvic muscle dysfunction can be helpful for men with CP/CPPS, but regular treatment by a physical therapist is not feasible for many. To ensure men get more regular and affordable treatment, many physical therapists are already teaching men with CP/CPPS to do internal massage at home and to use instruments that facilitate that. Now, these A Headache in the Pelvis authors and their colleagues have tested an instrument they developed for the purpose. The instrument couples a J-shaped wand with an algometer to prevent excessive or dangerous
massage force. After education by a physical therapist, 169 patients with pelvic pain (92 percent men and 8 percent women) started the protocol, performing weekly massage; 56 patients withdrew (but not because of adverse events). The sensitivity decreased significantly after one month, and even more after six months; 93 percent of the patients said they were very or moderately satisfied with use of the wand. The only side effect noted was rare, temporary mucosal bleeding. This kind of self treatment could be a safe, economical, and practical treatment option for many men with CP/CPPS.

Shockwave Therapy Called Promising for CP/CPPS
Is there evidence for ESWT therapy in men with chronic nonbacterial prostatitis/chronic pelvic syndrome?: Preliminary results of a controlled study
Michael Mathers, Stephan Degener, Stephan Roth, Theodor Klotz, Remscheid, Germany

Extracorporeal shockwave therapy (ESWT), a therapy usually used for urinary tract stones, seems to ease CP/CPPS symptoms, although the relief didn’t come immediately after treatment for the men in this trial. Ultimately, retreatment was needed. The study included 24 men whose CP/CPPS didn’t respond to other treatments, 14 of whom got actual treatment and 10 who underwent sham treatment. The men had at least three weekly treatments, which were focused on the prostate for actual treatment and on the filled bladder for sham treatment. The men who got the prostate-focused treatment had their NIH CPSI scores go down from 26 to 12 after three months, whereas the control men’s scores went down, but not as much—from 26 to 18. The International Prostate Symptom Scores showed similar improvements. Two men who got the actual treatment had blood in the urine for several hours. After three to six months, seven patients who got the actual therapy had symptoms return and underwent a new series of treatments.

Electromagnetic Stimulation May Help

The efficacy of electromagnetic stimulation for treatment of chronic prostatitis/chronic pelvic pain syndrome patients who do not respond to pharmacotherapy.
Woojoong Kim, Jae Seung Lee, Geonseok Lee, Wonjin Cho, Ha na Lee, Young Suk Lee, DeokHyun Han, Kyu-Sung Lee, Seoul, Republic of Korea

Electromagnetic stimulation may prove useful for pelvic floor dysfunction. Applied to the perineum, the therapy eased CP/CPPS symptoms in the 37 men who completed this uncontrolled study. The men, whose condition had not responded to medications, underwent 12 session over six weeks. NIH Chronic Prostatitis Symptom Scores improved by six or more points for 60 percent of the patients. International Prostate Symptom Scores and number of daily voids also improved significantly. Some three quarters of patients thought they benefitted and were satisfied with treatment, both immediately after treatment and also 6 months later. Side effects were few and included some urinary retention, hip joint pain, urethral discharge, and reflux.

Tanezumab therapy for chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS): preliminary assessment of efficacy and safety in a randomized controlled trial
The anti-nerve growth factor drug tanezumab appeared to be helpful in early studies in interstitial cystitis patients, but side effects brought the trials down. For CP/CPPS, however, this preliminary study didn’t even show it was effective. The 62 men in the study had pain scores of 4 or more (on a 10-point scale). One group got 20 mg of tanezumab intravenously and the other a placebo. Six weeks later, the improvements in pain were only marginal. Plus, there was no notable improvement in the NIH CPSI total score or in urinary frequency. Moreover, 80 percent of the patients who got tanezumab had adverse events, versus 66 percent of the placebo patients. The most common adverse effect of tanezumab was paresthesia, the sensation of tingling or numbness.

**EPIDEMIOLOGY**

**How High-Fat Diet Increases Prostate Inflammation**

High fat diet induces intraprostatic association of STAT-3 and NF-Kappa B in the nucleus- a cause for prostate inflammation
Eswar Shankar, Eugene Vykhovanets, Olena Vykhovanets, Sanjeev Shukla, Sanjay Gupta, Cleveland, OH

It’s already known that a high-fat diet is a risk factor for prostate inflammation, benign prostate enlargement, and prostate cancer. These researchers took on the task of exploring how diet may actually do that. They found that the high-fat diet significantly raised the levels of proinflammatory cytokines in the blood as well as the levels of expression of two important players in the cellular signaling pathways in inflammation, STAT-3 and NF-Kappa B.

**Large Prostate Stones Linked with Urinary Symptoms**

Influence of prostatic calculi on lower urinary tract symptom in middle-aged men
Won Jae Yang, Kyu Hyoung Cho, Bong Ki Kim, Ji Yoon Chung, Seung Whan Du, Yun Seob Song, Seoul, Republic of Korea

Using transrectal ultrasound, these researchers looked for stones in men’s prostates and then at whether stones correlate with lower urinary tract symptoms. Out of some 1,536 men, 799 had these stones, which were small in 615 men and large in 194 men. Large stones nearly doubled the risk of having moderate to high scores on the International Prostate Symptoms Score (IPSS).

**Heart Rates, But Not Stress Hormone Higher in Men with CP/CPPS and ED**

Hypothalamic-pituitary-adrenal axis activity and autonomic nervous system changes in patients with chronic prostatitis/chronic pelvic pain syndrome complicated by erectile dysfunction
Are autonomic nervous system and hypothalamic-pituitary-adrenal (HPA) axis abnormalities involved in CP/CPPS? These researchers aimed to find out by check heart rate variability (with Holter monitors) and levels of the stress hormone cortisol in men with CP/CPPS and erectile dysfunction (ED), men with CP/CPPS who only had urinary symptoms, and controls. The men with CP/CPPS and ED had greater heart rate variability but not higher cortisol than controls. Autonomic nervous system activity may have a connection with CP/CPPS and ED, but HPA axis changes do not, concluded the team.

**ED Doesn’t Help Differentiate Groups with CP/CPPS**

Inclusion of an erectile dysfunction domain to the UPOINT phenotype does not improve correlation with symptom severity in men with chronic prostatitis/chronic pelvic pain syndrome

Although most men with CP/CPPS have erectile dysfunction (ED), which should be diagnosed and treated, ED doesn’t correlate with either the “phenotype” of CP/CPPS or how severe the symptoms are. Phenotypes, which are classifications based on what groups of symptoms patients have, may help doctors target therapy better and improve the study of treatments. A German study found that it was important to include ED to help classify CP/CPPS, whereas an Italian study did not. This US study of 100 men with the condition showed the presence of ED didn’t help predict the impact of CP/CPPS on symptom severity or quality of life.

**Clues to Why Men with CP/CPPS Have Higher Cardiac Disease Risk**

Greater endothelial dysfunction and arterial stiffness in men with chronic prostatitis/chronic pelvic pain syndrome—a possible link to cardiovascular disease

It’s known that men with CP/CPPS have a significantly higher rate of cardiac disease than other men. This research points to stiff arteries and abnormal function of blood vessel linings as the culprit. In the 21 CP/CPPS patients, a measure of arterial stiffness was significantly higher and a measure of endothelial function significantly lower than in the 14 control men. Endothelial dysfunction did increase with age, but age wasn’t a factor in arterial stiffness.