CLINICAL VIGNETTE

Integrative East-West Approach to a Patient with Chronic Epididymitis

Sara Ptasnik, MD and Edward Hui, MD

Case Presentation

A 32-year-old male presented to the Center for East-West Medicine with chronic recurrent epididymitis and hip pain for three years. He had epididymitis flares every few months without a clear trigger, which were typically associated with testicular swelling, pain, and mild dysuria. He also developed right hip and groin pain around the same time, without injury or preceding trauma.

He had been evaluated by several urologists with normal urinalyses, urine cultures, and testing for sexually transmitted infections. Other negative/normal testing included ANA, CRP, TSH, testosterone level, semen studies, and testicular ultrasound. He completed trials of meloxicam and multiple courses of antibiotics without improvement. He reported some improvement with pelvic floor physical therapy but not complete resolution of symptoms. His hip pain, was evaluated by sports medicine with normal hip MRI. He completed a course of physical therapy, which he did not find helpful. Other strategies including massage, stretching, and aerobic exercise seemed to help the most.

The patient also had history of anxiety and insomnia, and the persistent pain worsened his underlying anxiety worse. He had a high stress job with an inconsistent sleep schedule when his symptoms started. He participated in cognitive behavioral therapy (CBT), practiced regular meditation and breathing exercise and made significant improvements in his sleep hygiene. He also changed jobs, to a less stressful new position.

Review of symptoms was positive for occasional loose stools, heartburn, and allergic rhinitis. Past surgical history included bilateral inguinal hernia repair in infancy. He denied any significant family history. He took an antihistamine and used nasal fluticasone as needed for allergy symptoms, clonazepam as needed for sleep, as well as daily fish oil, and vitamin D3. He denied recreational drug use and reported 4-5 alcoholic drinks a week. His diet varied, mostly home-cooked and with minimal processed foods. He participated in weight training and aerobic exercise 5 days a week.

On initial physical examination, his vital signs were within normal limits. Genitourinary exam was deferred, as the patient denied any current testicular swelling or redness and had recently seen urology. Hyperirritable trigger points were noted in his cervical, trapezius and rhomboid muscles, as well as his right external abdominal oblique, right tensor fasciae latae, and right sartorius muscles (Figure 1). In addition to his diagnoses of chronic epididymitis, chronic hip pain with pelvic floor dysfunction, and myofascial pain syndrome from the conventional biomedical perspective, the patient was diagnosed with Liver Damp-Heat with Liver Qi Stagnation and Spleen Qi Deficiency from a traditional Chinese medicine (TCM) perspective. An integrative treatment plan was initiated, which included a trial of trigger point injection (TPI) therapy, acupuncture, instruction in self-care activities and lifestyle modification.

The patient was advised to continue physical therapy for both his hip pain and pelvic floor dysfunction and to optimize posture and ergonomics for his neck and shoulder tension. He was encouraged to incorporate gentle mind-body practices, such as yin yoga or qigong, and continue with regular meditation, breathing exercises, and CBT. An anti-inflammatory diet was reviewed, and TCM nutritional advice recommended, including increased intake of "Qi Tonic" foods such as cooked root vegetables, bone broth, and stews as well as foods that resolve "Dampness" and are more "Cooling" such as dark leafy green vegetables, mung beans, pearl barley, and chrysanthemum tea. He was encouraged to limit intake of overly sweet and processed foods, fried foods, excessively hot and spicy foods, and alcohol. A transcutaneous electrical nerve stimulator (TENS) unit was recommended for tight muscles of the neck and hip, and also for acupoint stimulation at relevant locations on the TCM Liver and Spleen Meridians.

The patient returned to clinic every 3-4 weeks for a total of 5 sessions. During each visit, TPI with 1% lidocaine was performed in the neck, shoulders, and hip, including the splenius capitis, trapezius, levator, rhomboids, external abdominal oblique, tensor fascia latae, gluteus, vastus medialis, and sartorius muscles. Acupuncture was also performed at each visit at the following points with some variation: Large Intestine-4, Liver-3, Kidney-3, Stomach-36, Gallbladder-34, Spleen-6, Liver-5, Large Intestine-11, Spleen-9, Spleen-10, Conception Vessel-6, Yintang, and Sishencong. The patient reported improvement in muscle tension with a reduction in palpable trigger points with each succeeding examination. There was no recurrence of epididymitis symptoms during his treatment course. However, subsequent chart review noted follow up urology for persistent symptoms and evaluation for spermatic cord blockage.

Discussion

Chronic epididymitis is described as pain or discomfort lasting at least three months in the scrotum, testicle, or epididymis. Compared with control patients, men diagnosed with chronic epididymitis had more sexual partners and had higher incidence of past sexually transmitted infections. They also had more self-reported musculoskeletal, neurologic, mental health, and infectious and/or inflammatory medical problems. Incidence and prevalence of chronic epididymitis is not reliably reported. One urology clinic reported an average age of 46 years, with average symptom duration of 4.9 years, with most patients reporting frequent pain with significant impact on quality of life.[1] Causes of chronic epididymitis include infective, post-infective, granulomatous, drug-induced, idiopathic, or obstructive. Chronic scrotal pain may also result from referred nerve pain from other areas or organs that share the same nerve pathways such as from low back pain, hip pain, ureteral obstruction, or pudendal neuropathies. In many cases, such as with this patient, there is no single clear cause for the pain symptoms.[1,2]

Conventional therapy for chronic epididymitis includes scrotal support, heat, avoidance of aggravating activity, and pelvic floor physical therapy (PFPT). There is not much data to support pharmacotherapy unless an infection is identified or suspected. Patients are often empirically prescribed antibiotics and nonsteroidal anti-inflammatory drugs. A trial of neuropathic agents such as tricyclic antidepressants or gabapentinoid is also common. Procedures and surgical interventions including spermatic cord block or pulsed radiofrequency of the spermatic cord, micro-denervation of the spermatic cord, epididymectomy, or orchiectomy have been utilized as a last resort when conventional therapy has not offered relief.[1,2]

Chronic testicular or scrotal pain has been associated with pelvic floor dysfunction. Planken et al evaluated 41 patients with chronic testicular pain found that 93% of patients had at least 1 symptom suspicious for pelvic floor dysfunction and 88% of patients had increased resting tone of pelvic floor muscles on EMG.[3] Another study by Farrell et al in patients with chronic scrotal pain found that after a mean of 12 pelvic floor physical therapy sessions, 50% of patients showed improved pain with 13% of patients having complete resolution of pain.[4] Pelvic floor physical therapy was effective in improving our patient's symptoms.

It is important to recognize that the musculoskeletal system does not work in isolation. If there is tension in one part of the body, other areas may be affected. For instance, this patient not only exhibited pelvic floor tension but also had significant tightness in his ipsilateral abdomen, hip and adductor muscles, as well as in his neck and shoulders. TPI therapy is a recognized treatment for myofascial trigger point pain and has been shown to be effective in deactivating trigger points and reducing pain.[5] TPI to pelvic floor muscles can be administered for pelvic floor dysfunction through vaginal, rectal, or transperineal approaches, and is performed more commonly in women with chronic pelvic pain.[6,7] Assessing and treating the surrounding external musculature can also improve chronic pelvic pain. A study by Kim et al reported significant improvement in pain scores in men with chronic pelvic pain or chronic prostatitis using TPI under ultrasound guidance to the iliopsoas, hip adductor, and abdominal muscles.[8]

In addition to helping guide the selection of acupuncture points, TCM theory can be useful in guiding the examination for myofascial trigger point location. For this patient, examining the Liver and Gallbladder meridians revealed a number of hyperirritable trigger points that were treated at each visit. Furthermore, knowing that these meridians are primarily affected by stress, pent-up anger, and frustration provided a framework to highlight the role of psychological factors in driving and perpetuating physical symptoms and thus encourage mind-body strategies to address and process emotions.[9]

There is growing evidence to suggest that acupuncture can be beneficial for patients with chronic pelvic pain or chronic epididymitis. One recent study randomized 76 men with chronic epididymitis to one group treated with acupuncture and herbs versus a group treated with antibiotics. They found a significantly greater recovery response for the acupuncture and herbs group as well as a greater improvement in testicular blood flow and epididymis diameter.[10] Another study of 86 patients with chronic orchialgia found a significant improvement in pain scores in the patients receiving electroacupuncture compared to indomethacin.[11] A larger randomized study with 440 men with chronic prostatitis or chronic pelvic pain syndrome found a significantly greater response in the acupuncture group compared to the sham acupuncture group, with sustained difference 6 months later.[12] A recent meta-analysis also reported benefit of acupuncture for chronic prostatitis or chronic pelvic pain but suggested that more studies are needed to assess acupuncture efficacy for chronic epididymitis.[13]

Most clinical studies evaluating efficacy of acupuncture in these syndromes, typically provide treatment at least once a week. This patient was seen on average every 3 weeks due to limitations of space and staffing. More frequent visits may have resulted in more pronounced benefit. It would be helpful to know why this patient did not return for follow-up to explore potential barriers to further integrative East-West medical treatment. These include cost, travel, accessibility, treatment-related discomfort, worsened mental health, or perceived lack of benefit.

This patient did not report complete resolution of his chronic epididymitis. His case illustrates the complexity of this diagnosis and the potential benefit of an integrative East-West medical approach. This included evaluation and treatment of myofascial trigger points and pelvic floor tension, management of underlying psychological factors, and reinforcement of lifestyle modification including appropriate diet and exercise and sleep optimization. A TCM assessment may be helpful in guiding specific lifestyle recommendations as well as individu-

alized acupuncture treatment. Although sufficient evidence specifically recommending acupuncture for chronic epididymitis is lacking at present, acupuncture has proven useful in the treatment of similar conditions. An integrative East-West medical approach may be considered in patients with chronic epididymitis and other hard-to-treat conditions.

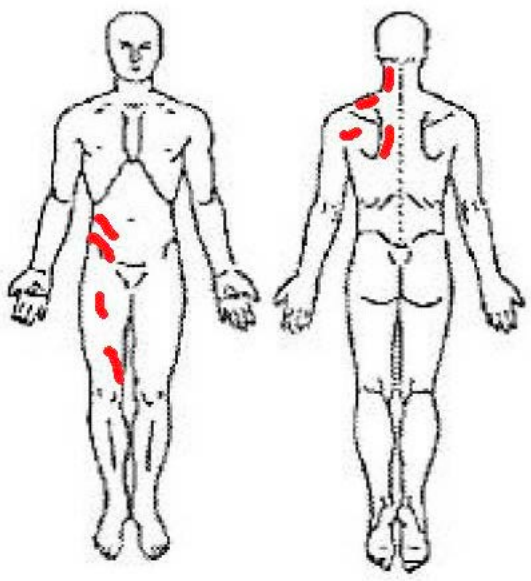

Figure 1: The location of hyperirritable trigger points palpated on the patient is indicated by the red marks.

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