Musculoskeletal Dysfunction Has Role in Pelvic Pain

BY PATRICE WENDLING
Contributing Writer

CHICAGO — Up to one-fourth of women with chronic pelvic pain also have piriformis or levator ani tenderness, according to a study presented by Dr. Frank Tu at a meeting sponsored by the International Pelvic Pain Society.

Musculoskeletal dysfunction—including tenderness and spasms of the levator ani and piriformis—has been reported as a treatable cause of chronic pelvic pain. The efficacy of treatments such as manual therapies, electrical stimulation, injected medications, and surgeries ranges from 20% to 90%, according to the literature, which is mostly comprised of case studies.

"Although musculoskeletal dysfunction is increasingly implicated as a cause of many pelvic pain conditions such as interstitial cystitis, we really don't have much information about the diagnosis, evaluation, treatment, and epidemiology of this particular condition," Dr. Tu said. "This is the first study to look at the frequency of these disorders in a large referral clinic population."

A retrospective study of 987 women referred to a pelvic pain clinic at the University of North Carolina, Chapel Hill, for chronic pelvic pain, found levator ani tenderness in 22% and piriformis tenderness in 13% of the 942 of patients evaluated for those conditions.

There were no differences between those with piriformis tenderness and those with levator ani tenderness in age (mean 30 years), pain duration, or sexual abuse history. Of the 987 women studied, 288 had a history of sexual abuse, said Dr. Tu, noting that the proportion of women with a history of abuse did not differ between the women with and without musculoskeletal dysfunction.

In all, 85% of patients had pain for at least 6 months, and most had daily pain. Two-thirds of the cohort had a diagnosis of depression, based on the Beck Depression Inventory.

A standardized abdominal exam was performed on all patients that included a single-digit intravaginal palpation of the levator ani and piriformis muscles, and either a Kegel contraction to identify the levators or an external hip rotation to identify the piriformis.

A visual analog score of 0-10 was assigned by the physician to rate the degree of clinically meaningful tenderness.

Piriformis and levator ani tenderness was positively associated with the number of painful abdominal-pelvic locations reported, pain associated with bowel movements, and higher Beck Depression Inventory and McGill Pain Questionnaire scores.

Patients with levator ani tenderness reported 4.6 pain locations, compared with 3.7 locations for those without such tenderness; patients with and without piriformis tenderness reported 4.6 and 3.8 pain locations, respectively.

Pain with bowel movements was reported by 372 study patients, including 51% of those with levator ani tenderness 50% of those with piriformis tenderness.

Levator ani tenderness was positively associated with a higher number of surgeries for pain. Of the 212 patients with levator ani tenderness, 23% had no previous surgeries, 61% had one-to-three surgeries, and 17% had more than three surgeries, compared with 30%, 60%, and 10%, respectively, of those without levator ani tenderness.

Neither condition was associated with pain that worsened with intercourse, although there was a trend toward a higher proportion with piriformis tenderness.

The data suggest that the prevalence of piriformis and levator ani tenderness may be increased among women with more intense chronic pelvic pain, said Dr. Tu, director of the division of chronic pelvic pain, department of ob.gyn., Evanston (Ill.) Hospital. A possible association with dyschezia also may exist. ■

Interstitial Cystitis Often Seen With Adenomyosis

BY MIRIAM E. TUCKER
Senior Writer

NEW YORK — Interstitial cystitis frequently coexists with adenomyosis, just as it does with endometriosis, Stephen A. Grochmal, M.D., said at an international congress of the Society of Laparoendoscopic Surgeons.

"How many patients do we have who continue to have pain after endometrial ablation or after hysterectomy? Before we send them to a psychiatrist, perhaps we ought to give them a 5-minute screening questionnaire to see if they have associated interstitial cystitis," Dr. Grochmal of the division of operative gynecology, endoscopy, and laser surgery at Howard University, Washington.

If the patient's score on that questionnaire—the Pelvic Pain and Urgency/Frequency (PUF) patient symptom scale—suggests interstitial cystitis (IC), then diagnostic tests are indicated.

In 2002, Maurice K. Chung, M.D., and associates described the "evil twins" of endometriosis and IC in chronic pelvic pain syndrome after finding a 70% overlap of the two conditions in 60 women (JSLS 2002;6:311-4).

"I considered that we might see the same thing with adenomyosis. After all, it is endometriosis of the myometrium," Dr. Grochmal explained.

So he retrospectively analyzed 287 women who were part of an ongoing study that compared the long-term effect on amenorrhea rates of endometrial resection by Nd:YAG laser versus resectoscope. Despite alleviation of their uterine bleeding, 60% (172) reported postoperative chronic pelvic pain, along with urinary urgency and frequency, dysuria, rectal pain, perineal pain, dysmenorrhea, decreased sexual intimacy, and decreased quality of life.

Following a review of their surgical pathology reports and examination of uterine shavings or laser-excised tissue strips to exclude subbasalis diagnoses, "pure" adenomyosis was confirmed in 48 (28%) of the women. Of them, 32 (67%) had a score greater than 6 on the PUF scale, suggesting IC. Of those 32, 27 (84%) had positive potassium sensitivity test scores.

With use of established criteria for cystoscopy/hydrodistention, IC was confirmed in 25 (78%) of the 32 women, and in 1 (6%) of the 16 women with PUF scores less than 6.

Of the remaining 124 chronic pelvic pain patients who did not have adenomyosis, 54 were randomly selected for the same testing. Of those, 6 (11%) also had confirmed IC, in contrast to the total 60% of those with adenomyosis. In patients who have chronic pelvic pain after treatment for excessive uterine bleeding, adenomyosis may be the cause of the bleeding and the bladder may the cause of the chronic pelvic pain, Dr. Grochmal said. ■

Women With Vulvar Disease More Likely to Have Bladder, Bowel Pain

BY MARY ANN MOON
Contributing Writer

WASHINGTON — Women who have vulvar disease should be asked specifically about bladder and bowel pain, and treated accordingly, Colleen M. Kennedy, M.D., advised.

Such women are twice as likely as are general gynecology patients to have bladder pain and bowel pain. "We hypothesize that certain vulvar or vaginal diseases are not isolated clinical entities, but rather represent symptoms of a global or generalized pelvic floor disorder," she said at the annual meeting of the Central Association of Obstetricians and Gynecologists.

Dr. Kennedy and her associates at the University of Iowa, Iowa City, assessed the rates of painful bladder syndrome (interstitial cystitis) and irritable bowel syndrome in 324 women who were being treated at a vulvar disease clinic, and compared them with the rates among 321 control subjects attending a general gynecology clinic.

Of the women with vulvar disease, 12% reported bladder pain, vs. 6% of the controls. Similarly, 23% of those with vulvar disease had bowel pain, vs. 11% of controls.

The data showed that women with bladder pain were 2.2 times more likely than those without to have been treated for vulvar disease. Women with vulvar disease had a mean score of 20.3 on the Urinary Distress Inventory's pain subscale, compared with 5.3 for women without vulvar disease.

Likewise, women with functional bowel disorders were 2.1 times more likely than were those without such disorders to have been treated for vulvar disease.

The higher prevalence of painful bladder and painful bowel syndromes in women with vulvar disease may reflect a common etiology for all these disorders. The design of this study, however, did not allow the researchers to tease out whether there is a common etiology "or whether treatments for one disorder may exacerbate or cause the other disorders.

"From a clinical point of view, it is clear that women with vulvar disease should be queried about bladder and bowel pain, and treated accordingly," Dr. Kennedy said.

That the study also showed that women with vulvar disease had nearly a fourfold higher risk of undergoing hysterectomy than did the general gynecology patients. "To our knowledge, ours is the first large clinic comparison to report this association," she said. ■

Chronic Pelvic Pain Could Signal Interstitial Cystitis

SAN FRANCISCO — In a large majority of women presenting with chronic pelvic pain, the bladder is the pain-generating organ, Edward J. Stanford, M.D., said at the annual meeting of the American Association of Gynecologic Laparoscopists.

In three studies involving almost 300 women with chronic pelvic pain, the prevalence of interstitial cystitis ranged from 70% to 82%, said Dr. Stanford of St. Mary's Good Samaritan Medical Center, Centralia, Ill.

In the most recent and thorough of these studies, Dr. Stanford followed 64 women with chronic pelvic pain for a year. Each completed the Pelvic Pain and Urgency/Frequency questionnaire and underwent a vulvar touch test, a potassium sensitivity test, cystoscopy with hydrodissection, and laparoscopy. During the laparoscopy, the investigators biopsied suspicious lesions and removed all adhesions.

Although 64% of the women had adhesions, the pain could not be attributed to that, Dr. Stanford said. In 70%, the bladder was the pain-generating organ, 28% had biopsy-proven endometriosis, and 20% had vulvar pain.

Therefore, in the differential diagnosis of chronic pelvic pain, interstitial cystitis must be ranked first, with irritable bowel syndrome, endometriosis, and vulvodynia a distant second, third, and fourth, respectively. Recurrent urinary tract infection was cited in 7% of the cases.

—Robert Finn