**CHRONIC PELVIC PAIN**

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**Editor’s note:** Following is an excerpt (chapter 19) of Integrative Women’s Health, a new reference book edited by Victoria Maizes, MD, and Tieraona Low Dog, MD, to be published by Oxford University Press in March 2010. A review of the book appears on page 76.

Chronic pelvic pain (CPP), the subject of whispered complaints and misplaced shame, diminishes the quality of life and overall well-being for almost 1 in 4 women. It is the second most common gynecological complaint and accounts for 13% to 20% of gynecological consultations and up to 52% of diagnostic laparoscopy.

The “disease with 20 names” has many often overlapping physical, functional, and psychological etiologies. It can be challenging to elucidate the pain generators. For many women, despite enduring multiple interrogations and procedures, there will be no definitive diagnosis. Often symptom relief, rather than resolution, is the treatment goal. After a brief respite, pain may return, treatment side effects may become intolerable, and the woman is forced back into the medical maze—or to resign herself to living her life in pain.6

This is not a comprehensive overview of CPP. Rather it is a look at the difficult journeys of three women that illustrate, in part, the oft-overlooked role of nonphysiologic changes in body mechanics impacting somatic structures (muscle, fascia, ligament, tendon). Such imbalances can, over time, be the cause of considerable pain and discomfort; the effects can multiply as the body accumulates layers of compensation. The result may be hard to identify and treat unless malalignment or somatic dysfunction is included in the differential diagnosis.

Another often under-deduced contributor to chronic pain is past or present abuse: physical, sexual, and emotional, including neglect. This is by far the most delicate part of a patient’s history to explore, and yet, it may be as important to address as the physiologic changes. In fact, abuse can impact physiology and anatomy through the effects of a chronically overactive, hyper-vigilant sympathetic nervous system.7

Perhaps these additional approaches, or others they inspire, can expand our diagnostic and therapeutic options and help diminish the disappointment and inadequacy we experience when we are unable to ease our patients’ suffering. The third case is presented in significantly more detail than the first two as it covers more ground in prevalence, time, and complexity.

**DYSENOMORRHEA: IT'S JUST A SPRAINED ANKLE**

Case Study 1

Pamela’s gynecologist referred her for recent onset dysmenorrhea. Up until 8 months prior, she had been free of premenstrual and menstrual morbidities. At age 38, her cramps became so severe that she started to miss work. Lab results and imaging studies failed to reveal any abnormalities. A detailed history that included questions about trauma and injury uncovered a traumatic sprained ankle about 18 months prior. It had taken weeks to heal; the only therapy had been ice and rest.

Physical examination revealed tenderness at both sacroiliac joints. The ankle had normal range of motion and no residual talofibular ligamentous laxity. A twitch response in the inferior rectus abdominus identified a trigger point. Osteopathic palpation revealed tenderness at the superior aspect of the pubic symphysis and a “listening” (restriction) of the right broad ligaments.

Utilizing osteopathic manipulative treatment (OMT) and viscerofascial techniques, Pamela was treated three times over 6 weeks for alignment of the pelvic bowl and sacrum, rebalancing the pelvic floor muscles and pelvic organs using external maneuvers. A short course of physical therapy corrected a lack of proprioception at the ankle (common after sprains and a source of chronic reinjury), and Pamela’s dysmenorrhea was resolved.

**Discussion**

Malalignment of anatomical structures can have a dramatic effect on physiology.8 Once there is a disruption in the biomechanical relationships within the body, all surrounding and supported structures compensate.9 Changes include asymmetries in muscle length, power, and weight-bearing and can affect circula-
and organs, but also the circulatory and neural elements within the connective tissue. The “ligaments” of the pelvis, unlike most in the body, contain blood vessels and nerves, therefore acting more like mesenteries. Over time and amplified by many movements, somatic dysfunction developed (Box). Untreated, this positive feedback cycle could also, over time, impact autonomic innervation as well as induce vasoconstriction and visceral spasm with a concomitant slowing of venolymphatic flow. The “ripple effect” can transmit even further and often leads to a reorganization of structures that results in pain far removed in time and location from the initial injury.

Musculoskeletal dysfunction can affect internal organs that are innervated at the same spinal cord segment. Similarly, visceral afferents can create somatic dysfunction that may also include active trigger points that are often present in women with CPP, irrespective of the presence or type of the underlying pathology. They may be of autonomic reflexive origin or the result of muscles being either too long or too short. While treatment with injection, dry needling, and OMT such as positional release and muscle energy is very useful, sometimes it does not result in permanent relief. Both structural and visceral elements need to be evaluated.

POSTPARTUM PAIN AND STRESS INCONTINENCE—BUT THE BONE SCAN WAS NEGATIVE! Case Study II

Since the birth of her son 6 months prior, Susie continued to have low back and pelvic pain. She had experienced an uneventful pregnancy and delivery with some mild low back pain after the 32nd week. Raising a leg to get her son strapped into his car seat, getting dressed, and climbing stairs hurt the most. Her pain was 5/10, with climbing stairs being “just about unbearable.” Clearly upset, Susie also reported ongoing stress incontinence and a mood that grew darker daily. She was increasingly distraught about the future, about not being able to keep up with her son when he started crawling and walking. No significant stressors or contributory past traumas were elicited.

Imaging: Lumbar spine and pelvic X-rays were unremarkable; bone scan, normal.

Physical examination revealed tenderness to palpation at the right quadratus lumborum, anterior inferior iliac spine, posterior superior iliac spine, and ischial tuberosity and decreased one-legged balance. Osteopathic examination revealed tenderness at the symphysis pubis and asymmetry of the pubic tubercles (left tubercle cephalad). Sacral sulci were asymmetric. The left medial umbilical ligament was shortened and a restriction noted over the right pubovesical (PV) ligament. After reassurance and explaining what had happened and the treatment approach, OMT, including myofascial techniques (muscle energy) utilized adductor activation while realigning the pubic tubercles. The inguinal ligament was gently released; sacral torsion was treated using a balanced ligamentous tension approach.

To address the stress incontinence, the left medial umbilical ligament was restored to normal length using external viscerofascial manipulation. Tension over the right PV ligament had already resolved. Finally, a short course of acupuncture helped release any remaining muscle tension as well as help restore Susie’s normally sunny disposition. In short order, she was back to celebrating and giving a mother’s special love.

Discussion

Somatic dysfunction frequently occurs in the context of normal imaging. While there was no disruption of the symphysis pubis and despite the absence of radiological evidence of osteitis pubis, there were both connective tissue and myofascial pain generators.

The body may not regain its previous physiologic relationships after the profound changes of pregnancy. In this case, nonphysiologic alignment affected the symphysis pubis—and therefore the pelvic bowl—as well as suspensory structures of the bladder. The slight change in the fibrocartilaginous pubic symphysis altered the muscle length and power of certain hip flexors that, in turn, exacerbated the already irritated symphysis. This relatively small deviation also affected the alignment of the sacrum between the ilia. Each step over the past 6 months had increased the discomfort and inflammation and, reinforced the altered, painful alignment of structures.

Stress incontinence may affect up to 10% of women at 3 months postpartum. In this case, the shortened medial umbilical ligament plus the pelvic floor disruption lessened the acute
angle of the bladder neck, leading to decreased inhibition of urine flow during valsava maneuvers. Realigning both specific cystic fascia as well as the supporting structures of the pelvis resolved the stress incontinence.15

Visceral dysfunction from many etiologies—childbirth, surgery, infection, and trauma (both physical and emotional)—can affect the soma.28–30 Adding this approach to a treatment plan has helped relieve many chronic pelvic pain syndromes.30

THE INVISIBLE PANDEMIC—ABUSE: CAN I TRUST YOU?

Case Study III

Katherine had suffered for 30 years with debilitating back and right leg pain and ulcerative colitis. She had broken several vertebrae in two severe automobile crashes, often lost her balance and fell, sometimes from spinal "lightning strikes." Despite this, Katherine had excelled in an international career, combatting the pain until finally, at 52, she could no longer work.

Imaging (CT):—old anterior-posterior compression fracture of pelvis; complex fracture posterior pelvis; flexion/distraction fractures T5-T8; transverse process fractures L2-L5.

Physical examination revealed a thin woman with kyphosis, missing spinous processes of T5-T8 with numerous well-healed scars over her entire body. The right anterior superior iliac spine was painful to palpation and her right iliopsoas was in spasm. She demonstrated decreased one-legged balance, no right great toe or ankle proprioception, and right-sided myoclonic jerks.

Despite the CT findings and somatic guarding of her pelvis, Katherine complained only of leg and spine pain. Although it was clear that she had pelvic pain, her wishes were respected, and her pelvis was treated only indirectly (from surrounding areas) until the time she could say more.

After 6 months of weekly treatment yielding steady but slow progress, one day Katherine was unable to lie on the treatment table, arching her pelvis into the air. Looking away, she hesitatingly confessed to previously unspoken pain "shooting from the right hip across to my left," that today was "louder than the beast in my spine."

Several months earlier, well into the therapy—work she had agreed could be lengthy due to the complex nature of her injuries—answers to questions about trauma (physical, emotional, sexual, and spiritual), other than the vehicle crashes, had been negative on all counts. It was not until that day she described the childhood beatings and vertebrae broken long before her accidents.

With Katherine’s consent and her psychologist’s active involvement, monthly 4-handed sessions were added using somatoemotional release (a body-centered therapy for uncovering and resolving residual effects of trauma) to address the pelvic pain. In that “understanding, safe room” she was able to allow images and associations to develop with gentle palpation, positional support, and a few open-ended questions at appropriate times.

The sessions allowed a controlled, safe return to key traumatic events. Skilled palpation revealed parts of her body that were “holding”—the expression of the sentient overload of her tissue. With the subtle pressure of “listening” hands, Katherine began to revisit certain traumas, the effects of which were stored in her body. Unfortunately, it came as no surprise that she had been a victim of severe emotional and sexual abuse, as well as relentless beatings. Based on her physical expression and dramatic body movements, the nonverbal periods took her to a hell where only brutality had existed. Often her body was just silently supported as it moved seemingly of its own volition into various postures.

During the third SER session, a child’s tremulous voice emerged during Katherine’s semitrance state asking, “Can I trust you?” She was greeted and told, “I can’t answer that. You will have to decide for yourself.” One month later she returned, identifying herself as Katherine’s inner healer who had decided she could trust and proceeded to guide both the therapy and her healing. That dialogue blossomed over the ensuing sessions into the purest expression of inner healer, patient, and physician working in partnership.

At first, Katherine could access this innate healing knowledge only during the sessions. As her inner healer grew stronger and matured, Katherine started being able to “hear” her without going into a trance-like state. In this way, she learned self-care that had not been demonstrated in her childhood. Gradually she made significant lifestyle changes: terminated an abusive relationship; started an antiinflammatory diet; added supplements, botanicals, and key nutrients; and started to meditate.

Her analgesic regimen of Kadian 1800 mg/d and Valium 10 mg three times daily changed to buprenorphine 28 mg/d in divided doses with devil’s claw (Harpagophytum procumbens),31 as well as hops (Humulus lupulus) and wild yam (Dioscorea villosa) for the cramping of her ulcerative colitis. Valerian (Valeriana officinalis), passionflower (Passiflora incarnata), kava kava (Piper methysticum),32 and ashwaganda (Withania somnifera) were also added. As her pain subsided, so did her myoclonic jerks.

Other providers added to her team included an endocrinologist for the hormonal changes caused by long-term opioid use and the effects of chronic trauma,33 a specialist in posttraumatic stress disorder who used eye movement desensitization therapy (EMDR) and a physical therapist for balance training.

Nine months into this intensive multidisciplinary approach, Katherine started being able to access memories while wide awake and identify and lessen the effects of triggers in the environment. Over time, this ability became integrated into her conscious awareness and behavior. The “beast” in her spine and pelvis, miraculously, became an ally, a harbinger of dangerous emotions, to be heeded, not battled.

Discussion

Chronic Pain and Abuse

The Centers for Disease Control’s 2005 report on Adverse Childhood Events reveals that in the general population women suffer childhood physical, sexual, and emotional abuse at rates of 27%, 24.7%, and 13.1%, respectively. In the chronic pain population, those percentages range as high as 50%34–36 and in chronic pelvic pain up to 64%.37,38 While abuse may or may not be causal,
it can affect coping with pain and recovery. 

Invisible trauma such as sexual and emotional abuse may often have a direct effect on the body. Concomitant depression and anxiety along with hypervigilance, a facilitated sympathetic nervous system, and alterations in the hypothalamic-pituitary-adrenal axis may contribute to the distress.

Eliciting and treating this level of trauma call for a primary therapeutic relationship of trust with a health care professional. For people who have been abused, trusting is difficult; betrayal always looms. Often emotional distress and not being taken seriously may lead patients to keep silent, especially during the initial visits. It takes time, patience, and a consistently nonjudgmental demeanor to gain a patient’s trust.

Studies encourage practitioners to inquire about abuse and that is often the case in clinical practice. However, some women would rather not be asked. If they are in states of denial, fear, or repression, one hopes to create a bond of trust and nonjudgment (shame is frequently the overarching emotion) while remaining patient.

Another option for asking about abuse might be using normalization to help remove the stigma, sense of isolation, and shame so many feel about a history of violence and the devastating footprint it leaves behind. A segue to asking about abuse, therefore, might be “in about half of women with pain similar to yours, we have found that people treated them badly, sometimes years earlier, even in childhood.”

Chronic pelvic pain as a pain syndrome responds to a multidisciplinary team that ideally includes a mental health specialist who is willing to work openly and collaboratively. Over 30% of women referred to a chronic pelvic pain clinic had a positive screen for PTSD. The clinician may consider some of the mind-body therapies that are useful in other pain syndromes, such as progressive relaxation, mindfulness-based stress reduction, hypnosis, biofeedback, and guided imagery or approaches such as cognitive behavioral therapy and EMDR that may be useful in PTSD as well.

Body-centered therapies such as OMT, massage, gentle chiropractic, Feldenkrais, Alexander, myofascial release, and trigger point therapy may be appropriate, as long as the practitioner is experienced and vigilant for signs of remembered or re-experienced trauma. These cases should include the active involvement of a mental health professional for addressing emotions and memories that may arise.

Nutritional changes including, at times, an elimination diet, play a key role in ameliorating both gastrointestinal as well as inflammatory contributors to CPP. Educating the patient in ways of self-nourishment that contribute to healing can have positive effects in both physical and emotional arenas. Often a little improvement from implementing small changes, such as adding one vegetable portion daily, sipping chamomile tea, or eliminating refined sugar, can be the catalyst for embracing the long-term attitudinal changes about self-care.

Because of the intricate interweaving of abuse into every aspect of a woman’s life and the lack of high-quality evidence for targeted treatments for specific patient subgroups, the clinician needs to use great delicacy, intuition, and understanding to be able to engage the woman and embark upon a healing journey. In presenting the possibility of a psychological component, the physical reality must still be validated or the woman who is already bathed in shame and fear may misinterpret and blame herself. Our challenge is to gently explain how psychophysiology may affect CPP. Mind and body are a unity, despite our medical model of separate specialties.

**WHAT YOU CAN DO**

1. Watch how your patient walks, in the waiting room, in the hallway, paying special attention to asymmetry of pelvic movement, side-to-side, if one hip flares more than the other, or the time spent on one leg is shorter than on the other. Any of these may indicate somatic dysfunction or “guarding” of an injured area.

2. Take a full history of trauma: physical, emotional, and sexual, including neglect. Be vigilant for changes in posture, eye contact, and vocal inflection and redirecting the question.

3. Take a careful dietary history. Sometimes food intolerances and proinflammatory foods may aggravate an existing condition. An elimination diet is an inexpensive way to test. Add antiinflammatory and anxiolytic teas, herbs, and supplements as needed.

4. Evaluate the pelvic bowl—check for asymmetry and/or tenderness (often both) at the superior aspect of the pubic symphysis or at the posterior part of the bowl, at the sacral sulci. Sometimes, there can be symmetry but tenderness on both sides of the sacrum, common after childbirth.

5. Check the posterior superior iliac spines using the Gillet, also called the stork test. A thumb on the ipsilateral PSIS should move caudad while the knee is being raised to marching position (thigh parallel to the floor). If one PSIS does not move, there is dysfunction.

6. Forge partnerships with skilled providers in mental health, mind-body, and other medical paradigms such as acupuncture and osteopathy. You will create a referral network as well as a virtual “team approach” for each patient.

7. Consider referral to a physiatrist well-trained in neuromusculoskeletal medicine to create and coordinate a treatment plan.

8. Offer a mind-body therapy such as MBSR, qi gong, or hypnosis as part of a treatment plan.

9. Manage expectations. It may take weeks or months to notice significant change. Patient education about time frames and recognizing incremental change can reduce frustration and increase self-observation skills.

**SUMMARY**

Though there are myriad etiologies of CPP, common therapeutic targets include inflammation, somatic dysfunction, and psychological disturbances. Inflammation may be addressed not only with dietary changes including nutritional and botanical supplements
but also with mind-body therapies. Somatic dysfunction may respond to manipulative therapies provided by osteopathos,\textsuperscript{72} naturopaths, chiropractors, and some physical therapists. Therapists may also offer visceral, craniosacral, myofascial, and other whole-body therapies, as can highly trained massage therapists and body-workers. Mental health care may be key in many cases.

Integrative medicine heralds the return to a sense of the human being’s intrinsic capacity for healing, incorporating the vitalism of many of the therapies’ origins (traditional Chinese medicine, indigenous medicine, ayurveda, osteopathy, chiropractic, etc) with the gains made by a more reductionistic tradition. Given the complexity and wide variation of etiologies and symptoms of CPP, using an integrative approach may offer expanded therapeutic solutions.\textsuperscript{73} We must expand our capacity to listen to each patient—with ears, eyes, mind, heart, and hands.\textsuperscript{73} Each treatment plan may then be tailored to the unique history and perspective that lie within the individual. Doing so requires the essential elements of time, skill, and love.

**RESOURCES**

While the best sources for referrals are in your own network and community and from patients and colleagues, the following websites are available for practitioners of the work described above. This is only a partial list of therapeutic approaches that may be useful for chronic pelvic pain.

- American Academy of Medical Acupuncture, www.medicalacupuncture.org
- American Academy of Physical Medicine and Rehabilitation (physiatrists), www.aapmrt.org
- American Association of Acupuncture and Oriental Medicine, www.aaamonline.org
- American Association of Naturopathic Physicians, www.naturopathic.org
- American Botanical Council (membership required), abc.herbalgram.org/site/PageServer
- American Physical Therapy Association, www.apta.org (Select “women’s health” under expertise.)
- Biodynamics of Osteopathy (physicians trained in biodynamic cranial osteopathy), www.bioido.com
- Center for Mindfulness in Medicine, Health Care and Society, www.umassmed.edu/cfmi/mbsr
- EMDR International Association, www.emdria.org
- Milne Institute (craniosacral therapists), www.milneinstitute.com
- National Association of Myofascial Trigger Point Therapists, www.namtppt.shuttlepod.org (Note: Many physicians, especially physiatrists, work with trigger points as well.)
- Natural Standard: The Authority on Integrative Medicine (membership required), www.naturalstandard.com
- The Alexander Technique, www.alexandertechnique.com
- The Barral Institute (for visceral manipulation), www.barralinstitute.com
- The Cranial Academy (physicians trained in cranial osteopathy), www.cranialacademy.com
- The Upledger Institute, www.iahp.com/pages/search/index.php (Note: Search for therapists with many classes and experience in visceral, craniosacral, lymphatic, and/or somatoemotional release techniques.)

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