

Management of chronic pelvic pain

Optimization of care represents a priority and requires understanding of etiology to effectively diagnose and treat.

by LOUISE P. KING, MD, JD

Chronic pelvic pain (CPP) in women is defined as nonmenstrual pain lasting greater than 6 months. It accounts for over 10% of referrals to gynecologists with an incidence rate between 5.7% and 26.6%.¹ CPP is a common indication for surgery leading to 12% of all hysterectomies and over 40% of gynecologic diagnostic laparoscopies, yet up to 35% of these laparoscopies add little to treatment.² The optimization of care for women with CPP represents a priority and requires understanding the multifaceted etiology of pelvic pain and how to effectively diagnose and treat the condition. Few advances in technology have addressed this area of medicine and thus it represents a unique opportunity for innovation.

Diagnosis and underlying neuronal basis of pain

CPP may originate from both somatic and visceral structures which then converge in the spinal cord, leading to complex pelvic pain patterns.³ CPP often involves multiple organ systems resulting in pelvic organ “cross talk.” The convergence of visceral innervation in the dorsal horn can lead to 1 dysfunctional organ enhancing the pain of a second organ. One example is patients with endometriosis who have associated bladder pain syndrome and irritable bowel syndrome.⁴ Further complicating the picture, visceral pain may induce somatic pain through viscerosomatic convergence.⁵ This presents as pelvic floor tension myalgia or referred pain from specific organ locations.

Prolonged exposure to painful

stimuli can cause somatic peripheral sensitization resulting in hyperalgesia. Central sensitization may lead to somatic dysfunction, especially of the pelvic floor muscles.⁶ The processing of sensory pain information by our brain is regulated by cognitive and affective interpretation. Emotional events such as trauma and sexual abuse may regulate our pain perception and lead to persistent pelvic pain.⁷

Given this level of complexity, it is no wonder that patients and health care professionals alike become frustrated as they try their best to parse out etiologies of pain and potential successful treatment. This represents an opportunity for the development of optimal online content and tracking to assist with diagnosis and understanding for both patients and health care professionals.



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Patient evaluation

Evaluation begins with a thorough history and a detailed physical examination to tease apart contributing factors.⁸ The International Pelvic Pain Society has developed a detailed questionnaire, available for free on their website, to help providers obtain a pertinent history and guide the exam.⁹

A baseline ultrasound is frequently ordered but may be of limited value. However, patients with alarming symptoms such as hematochezia, postmenopausal bleeding, hematuria, or unexplained weight loss should be evaluated specifically for those symptoms with targeted imaging and possibly gastrointestinal (GI) endoscopy.

By contrast, specialized imaging protocols and experienced radiologists can reliably identify visceral sources of pain from ultrasound and magnetic resonance imaging (MRI), such as adenomyosis, deep infiltrating endometriosis, pelvic congestion syndrome, and pelvic adhesions.¹⁰ In the case of endometriosis, MRI or specialized ultrasound can identify endometriomas, obliterated posterior cul-de-sacs, deep infiltrating endometriosis, rectal endometriosis, and uterosacral ligament involvement.¹¹ That said, laparoscopy remains more accurate at detecting, diagnosing, and, hopefully concomitantly, treating endometriosis.¹² Musculoskeletal sources of pain may be evaluated by MRI or x-ray if suspected on examination.¹³

Treatment

The key to successful treatment of CPP for any patient is a holistic approach. Frequently, patients hope for a single cause and a single cure. However, this is highly unlikely. Helping patients accept that CPP is typically a multifactorial disease that can be difficult but not

Table 1		Potential Medical Therapy Regimens Specific to Suspected Endometriosis ¹⁴
Medication	Dose	Trial period
NSAID	Ibuprofen 800 mg every 8 hours	4-6 weeks
OCP	As directed with or without break for menstrual flow	2-3 months
Progestins	Medroxyprogesterone 10 mg daily up to 50 mg daily Norethindrone acetate 2.5 mg daily up to 30 mg daily Depo-Provera Mirena IUD	3 months
GnRH agonist	Lupron with progesterone add back	3 months (adverse effects significant)
Danazol	200-400 mg/day in 2 doses May increase to 800 mg/day	2 months (not to exceed 9 months; adverse effects significant)

GnRH, gonadotropin-releasing hormone; IUD, intrauterine device; NSAID, nonsteroidal anti-inflammatory drug; OCP, oral contraceptive.

impossible to treat is essential.

Initiating a medication regimen to treat CPP as an empirical first step is reasonable, assuming all potential contributing causes are addressed. If a patient fails initial medical therapy, a laparoscopy should be undertaken in an effort to confirm and potentially surgically treat disease ahead of more aggressive regimens (Table 1)¹⁴.

Key points related to surgical intervention

A significant number of outpatient laparoscopic surgical procedures for women are performed to assess for pain but with little benefit.¹⁵ When the procedure is done without a specific plan to address pathology if found, the risks, albeit low, outweigh any benefit.

Specific to endometriosis, any surgeon who undertakes a laparoscopy

should be prepared to proceed with excision of all visible lesions. Excision is likely superior to fulguration, especially in patients with deep infiltrating endometriosis.¹⁶ If a surgeon does not feel they could adequately treat apparent endometriosis, they should refer the patient to a surgeon who specializes, even for a diagnostic laparoscopy, to avoid unnecessary repeat surgeries.

Establishing normal anatomy is the ultimate goal of surgery when endometriosis, ovarian pathology, or adhesions are found. In the setting of advanced endometriosis or severe adhesions, this will typically involve fairly extensive lysis of adhesions including ureterolysis and enterolysis.

Typically, in stage 4 endometriosis, the posterior cul-de-sac is obliterated by bilateral endometriomas that may be adhered to each other as well as to

Table 2	
Potential Therapies	
Disorder	Potential therapies
Endometriosis	Empiric pharmacological treatment Laparoscopy Diagnostic and operative
Bladder pain	Pelvic floor therapy Bladder instillations Laparoscopy for endometriosis, if present
Irritable bowel syndrome	Elimination diets/FODMAP Pharmacological treatment Referral to GI department
Hypertonic pelvic floor disorders	Pelvic floor therapy Trigger point injections
Peripheral nerve disorders	Nerve blocks Neuromodulatory pharma Neurectomy/surgical decompression
Adhesions	Address GI contributions Supportive care Laparoscopy for site-specific adhesions
Chronic pelvic inflammatory disease	Antibiotics, only if subclinical infection persists Supportive care
Pelvic congestion syndrome	Progesterone therapy GnRH Hysterectomy Sclerotherapy Surgical ligation
Fibroids	Myomectomy/hysterectomy UAE
Ovarian remnant	Oophorectomy

FODMAP, fermentable oligosaccharides, disaccharides, monosaccharides, and polyols; GI, gastrointestinal; GnRH, gonadotropin-releasing hormone; UAE, uterine artery embolization.

the pelvic sidewalls and bowel. A combination of blunt and sharp dissection is helpful. Many surgeons also rely on either monopolar cautery, harmonic, or carbon dioxide laser to achieve dissection planes. A full knowledge of electrocautery and other energy sources is essential to achieve safe surgical dissection.

Endometriomas frequently rupture during this process. Copious irrigation and clearance of endometrioma fluid is important. The ideal method of treatment for endometriomas is not yet known. Recurrence of ovarian endometriomas is thought to be less frequent when ovarian cyst walls are removed, preserving normal parenchyma.¹⁷⁻¹⁹

Yet, aggressive surgical resection of endometrioma cyst walls leads to a decrease in anti-Müllerian hormone (AMH). Decreased AMH is associated with decreased ovarian reserve and thus less success with potential stimulatory cycles during in vitro fertilization. Some authors have proposed instead that ovarian endometriomas should be drained and the posterior aspect of the wall cauterized.²⁰⁻²² Surgeons should discuss this evidence with patients and should carefully tailor surgery in consultation with patients to address their goals. For example, in a young patient with severe pain, the excision of endometrioma walls to decrease recurrence would be ideal, whereas for patients seeking fertility treatments, drainage and cauterization may be more suited.

Prevention of postoperative adhesions is a priority in patients with chronic pelvic pain. Surgical technique, hemostasis, and copious irrigation are likely helpful in decreasing the potential for adhesions. The evidence is not robust enough to date to support the use of various barrier methods to prevent adhesions in surgery for pain or subfertility.^{23,24} Monopolar or preferably bipolar cautery can be used judiciously to address isolated areas of bleeding. If the bleeding is more diffuse in cystectomy, suturing remaining ovarian parenchyma in a purse string to achieve hemostasis through compression is likely preferred.²⁵

All efforts must be made to identify and address any potential area of injury at the time of surgery. Cystoscopy and sigmoidoscopy are valuable tools to assess for small areas of potential injury in instances when extensive adhesions to the bowel or lesions overlying the

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Increasing access to contraception in the United States

by BOB KRONEMYER

One year after the close of the Increasing Access to Contraception (IAC) Learning Community, participants had sustained their efforts in support of at least 1 goal: to improve women's access to the full range of contraceptive options. The study findings were published in the *Journal of Women's Health*.

The learning community, which took place from October 2016 to May 2018, was implemented by the Association of State and Territorial Health Officials (ASTHO) in partnership with the Centers for Disease Control and Prevention (CDC); the Department of Health & Human Services Office of Population Affairs; and the Center for Medicaid and Children's Health Insurance Program Services of the Centers for Medicare & Medicaid Services.

The learning community comprised 27 state and territorial jurisdictions, with teams from each jurisdiction consisting of state health department leaders, program staff, and provider champions.

"The original contraception-focused learning community began in 2014 as a way to share strategies and best practices in state-led immediate postpartum long-acting reversible contraception (LARC) protocol development and implementation," said lead author Carla DeSisto, PhD,

MPH, an epidemiologist in the CDC's Division of Reproductive Health in Atlanta, Georgia. "That learning community, called the Immediate Postpartum LARC Learning Community, expanded from 6 states in 2014 to 13 states in 2015."

Despite the progress, the CDC and ASTHO started hearing from participating and nonparticipating states that there was a need to go beyond immediate postpartum LARC alone and embrace policies and programs that increased access to the full range of contraceptive options.

Thus, in 2016, the learning community broadened to 27 jurisdictions with a scope of improving access to the full range of contraception.

The University of Illinois Chicago evaluation team contacted jurisdictions during May and June 2019 to complete a postassessment of goal achievement and sustainment through semi-structured interviews over the telephone or via email.

The 26 responding jurisdictions (96% participation rate) had created a total of 79 goals. At the final learning community meeting, 35 goals (44%) had been achieved. Three jurisdictions achieved all their goals by the close of the learning community.

At 1-year follow-up, jurisdictions were sustaining efforts for 69 (87%) of the total goals. In every jurisdiction, work on at least 1 goal that originated in the

learning community was continuing.

Many of the goals achieved by the jurisdictions addressed logistical barriers, provider awareness and training, consumer awareness, and reimburse-

At 1-year follow-up, jurisdictions sustained efforts for 87% of the total goals.

ment and financial sustainability. An example of a goal to address logistical barriers was reducing the number of clinics that require 2 visits for the placement of an intrauterine device (IUD).

"These findings underscore [the fact] that jurisdictions worked extremely hard to reach their goals," DeSisto told *Contemporary OB/GYN*. "They created...detailed action plans to achieve them. They were also able to leverage the multidisciplinary nature of their teams to accomplish their work, often across different agencies within their jurisdiction. It was really awe-inspiring to witness."

Nevertheless, during the interviews, the jurisdictions mentioned a number of barriers to achieving goals: lack of resources such as staff and funding, staff turnover, political concerns about contraception, and disagreement about priorities and interdependent goals.

"Some of the key facilitators to achieving goals are funding, leadership engagement and support, champions, stakeholder partnerships, and the



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actual learning community meetings and activities,” DeSisto said. “Forming a multidisciplinary team, creating an action plan, having regular meetings dedicated to the work, and learning from other jurisdictions and national experts helped teams achieve and sustain their goals.”

Future learning communities may find it beneficial to engage with jurisdictions to develop robust, well-defined goals that are coupled with implementation strategies, according to DeSisto. “It may also be advantageous for jurisdictions to consider how they will measure

success in achieving their goals before the work even begins, and to think about how they will sustain their work beyond the learning community,” she said. ■

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REFERENCE

DeSisto CL, Estrich CG, Kroelinger CD, et al. Increasing access to contraception in the United States: assessing achievement and sustainability. *J Womens Health (Larchmt)*. 2021;30(9):1217-1224. doi:10.1089/jwh/2021.0414

Expert KOLs sat down with *Contemporary OB/GYN*® at the North American Menopause Society (NAMS) 2021 Annual Meeting to share thoughts on their favorite sessions, discuss their latest research, and ponder the future of health care post pandemic with sexual health specialist Michael Krychman, MD.



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bladder have been addressed. Neither procedure can be completely relied upon to identify injuries that result from electrical or thermal injury, however, as delayed necrosis may not be identified.

Hysterectomy for CPP

Hysterectomy is the most common surgery performed for CPP, yet there are no randomized controlled trials that specifically address its efficacy. Prospective and retrospective trials have shown that hysterectomy significantly relieves pain in women.^{26,27}

A laparoscopic approach for hysterectomy is preferred and can be accomplished even with very large uteri. If a particular surgeon is not well versed in laparoscopic hysterectomy, they should refer the patient to a specialist who can ensure access to all surgical options.

Integrative care

Adjunctive therapies can be highly beneficial for patients with CPP. A multidisciplinary approach is ideal. If there is no center for pelvic pain in the area, creating cooperative plans of care with other specialists will be of greatest benefit to patients and will achieve the best outcomes.

Psychological counseling can be helpful to address poor coping mechanisms and the potential development of situational or chronic depression.

Pelvic floor therapists can address specific muscular dysfunction but can also work with biofeedback as well as behavioral and relaxation feedback modalities. Pelvic pain clinics can address opiate dependence if this has become an issue over time. These clinics can also help with scheduled trigger point injections that might coincide

with physical or pelvic floor therapy.

Patients will need to be counseled that they will require multiple visits over what is typically a long period of time. They also will have to make permanent behavioral changes to fully address their chronic pain.

Conclusions

CPP is a complex, potentially debilitating, and costly disorder that is poorly understood. Patients with this condition require extensive work-up, careful treatment plans, and counseling (**Table 2**). Whenever possible, referral to specialists is encouraged. ■

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FOR REFERENCES VISIT
contemporaryobgyn.net/ CPP