Challenges in managing chronic pelvic pain in women

At the 2018 Pelvic Anatomy and Gynecologic Surgery Symposium, held in Las Vegas, Nevada (December 6 to 8), Tommaso Falcone, MD, and Mickey Karram, MD, co-chaired a dynamic meeting. Topics ranged from facilitating vaginal procedures safely and effectively to surgery for stress incontinence and pelvic organ prolapse and safe use of energy devices and endometriosis management. A keynote lecture featured Sawsan As-Sanie, MD, MPH, on chronic pelvic pain management.

John Baranowski, Contributing Editor

Medical science's broad knowledge of endometriosis notwithstanding, "many questions remain unanswered" about the management of a condition that is often refractory to established therapies, observed Dr. As-Sanie, who is Associate Professor and Director, Minimally Invasive Gynecologic Surgery Fellowship, Department of Obstetrics and Gynecology, University of Michigan, Ann Arbor. How, then, should clinicians approach the challenge of caring for women with this enigmatic disease in the larger context of chronic pelvic pain (CPP), in which, as Dr. As-Sanie said, "one size never fits all"?

Complex correlation between endometriosis and CPP

Despite high prevalence and negative impact on the health and quality of life of women who have endometriosis, Dr. As-Sanie emphasized, it remains unclear why only some women with endometriosis develop CPP and why there is little, if any, correlation between disease severity and the intensity of pain.

The clinical approach to endometriosis and CPP can be frustrating for several reasons: there is minimal relationship between extent or location of disease with pain symptoms; there is no consistent relationship among inflammatory markers, nerve-fiber density, and pain symptoms; and pain can recur *after* medical and surgical therapy—often without evidence of recurrent endometriosis. Furthermore, the differential diagnosis of CPP is broad, and also includes adenomyosis, adhesions, chronic pelvic inflammatory disease, uterine fibroids, pelvic congestion, ovarian remnant, and residual ovarian syndrome. Chronic overlapping pain conditions are prevalent, too, including interstitial cystitis, irritable bowel syndrome, and vulvodynia, to name a few.[1]

CPP is not just a pain disorder

Dr. As-Sanie said that understanding of CPP must extend to include fatigue, memory difficulties, poor sleep, and heightened sensitivity to multiple sensory stimuli (eg, sound and light).[2] So what, she asked, do we know about endometriosis, chronic pelvic pain, and the brain? We know that CPP, with and without

FAST TRACK

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endometriosis, is associated with increased pain sensitivity and altered central nervous system structure and function.[3-5] Central amplification of pain can lead to chronic pain independent of nociceptive signals, including multifocal, widespread pain; higher lifetime history of pain throughout the body; and pain triggered or exacerbated by stressors. And CPP brings with it other, potentially debilitating problems, including elevated distress, decreased activity, isolation, poor sleep, and maladaptive illness behaviors.

Finding, then addressing, the culprit

Identifying the underlying cause(s) of CPP in the individual woman should guide clinical care. This includes the decision to proceed with, or avoid, surgery. Remember: Patients with centralized pain respond differently to therapy; surgery is less likely to help relieve the pain.

Dr. As-Sanie offered several fundamental guidelines for managing CPP:

- Treat early, to prevent transition from acute to chronic pain; treatment delay increases connectivity between pain regulatory regions.
- Hysterectomy is not definitive therapy for all women with endometriosis or CPP.[6]
- Take a multisystem approach, comprising medical, behavioral, and interventional strategies.
- If an organ- or disease-based diagnostic and treatment approach does not work, reconsider the diagnosis; re-evaluate comorbid psychosocial variables; and consider treating centralized pain.
- Choice of treatment should include consideration of cost and adverse-effect profile.
- If one modality is ineffective, try another.

FAST TRACK

For centralized pain treatment, evidence is strong for dual reuptake-inhibitor antidepressants and anti-convulsants with analgesic properties

What are the levels of evidence for centralized pain treatment?

Available pharmacotherapeutic agents have modest benefit, possibly because the population of pain patients is heterogeneous, with various underlying mechanisms of pain. And, Dr. As-Sanie pointed out, clinical tools do not currently exist to pre-emptively select the right medicine for individual patients.

Evidence is strong, Dr. As-Sanie noted, for dual reuptake-inhibitor antidepressants, such as tricyclic compounds (amitriptyline, cyclobenzaprine) and serotonin–norepinephrine reuptake inhibitors, and for anticonvulsants with analgesic properties (pregabalin, gabapentin). Evidence is "modest," Dr. As-Sanie said, for tramadol, gamma hydroxybutyrate, and low-dose naltrexone, and "weak" for cannabinoids, human growth hormone, 5-hydroxytryptamine, tropisetron, and S-adenosyl-L-methionine. There is *no* evidence for using opioids, corticosteroids, nonsteroidal anti-inflammatory drugs, benzodiazepine and non–benzodiazepine hypnotics, or guaifenesin.[7]

When surgery or pharmacotherapy alone fail to yield the necessary outcome, consider adjunctive nonpharmacotherapy.[8] For example, there is strong evidence for patient education, aerobic exercise, and cognitive-behavioral therapy; modest evidence for acupressure, acupuncture, strength training, hypnotherapy, biofeedback, trigger-point injection, and neuromodulation; but only weak evidence for chiropractic, manual and massage therapy, electrotherapy, and ultrasound.[7]

With CPP, "one size never fits all"

Dr. As-Sanie concluded with a reminder that CPP can be the product of any of a range of underlying contributory causes. Pathology might stand foremost as you search for the source of pain and an effective treatment, but keep in mind that genetics, environment, coexisting pain conditions, the patient's ability to cope, and her resilience and social support might play a role. ●

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