Persistent Pelvic Pain

By SANDRA HILTON, MS, PT

Patients seek medical care for persistent pain and functional limitations at all direct access points in the United States. Just as persistent low back pain, with its complexity of diagnoses, treatment options, and functional outcome measures continues to be studied and debated (1,2), the study and treatment of persistent pelvic pain is also a growing area for robust discussion and critical thinking among clinicians.

The Silent Presence of Pelvic Pain

Persistent pelvic pain can be profoundly isolating in both men and women. Psychosocial repercussions, cultural barriers, and lifestyle disruptions, combined with difficulty describing the pain and delaying discussing the problem with a health provider, leave many patients untreated. The patient may endure years of suffering before reaching a specialist in pelvic pain disorders. Research shows that chronic pelvic pain in women is often a longstanding condition, and as many as 1 in 4 women of childbearing age in the United States suffers from a pelvic floor disorder, such as urinary or fecal incontinence or pelvic organ prolapse (3,4).

Perhaps all clinical providers should routinely ask patients presenting with low back pain if they are experiencing painful intercourse, pain in sitting, or pain with bowel movements. These screening questions may help pierce the silence associated with pelvic pain.

An Interdisciplinary Approach to Pelvic Pain

The multiple roles of the bony pelvis and its contents, along with the involvement of the viscera and nervous, endocrine, and

immune systems, create the potential for a multi-system dysregulation even more complex than that of chronic low back pain. Unraveling the complexity of pelvic pain requires an appreciation of urogenital function, referred visceral pain, infectious and dermatological disorders, and biomechanical demands, and sensitivity to a possible history of physical or psychological abuses related to urogenital function. In keeping with the current biopsychosocial practice recommendations in pain literature, the assessment of persistent pelvic pain must address psychoneuroimmune issues. Communication and cooperation among medical professionals are needed to perform a careful medical evaluation and psychological screening, as well as to provide sexual counseling, cognitive behavioral therapy, and occupational and physical therapy, with the goal of graded return to normal function.

Peripheral Tissues and Beyond

Structurally, the muscles of the pelvic floor provide a supportive role in men and women, requiring muscular coordination for contraction and relaxation. The connective tissue, nerves, lymphatic system, and vascular structures must be tolerant to the pressures and movement in the area for optimal homeostasis. Dysfunction of the muscles and connective tissue are addressed in the literature as Myofascial Pain Syndrome (5). The concept of a hypertonic pelvic floor leading to the taut band associated with a trigger point has been used to support manual therapy, dry needling, Botox injections, medicated creams and suppositories, and relaxation techniques. All of these treatments are aimed at decreasing local tissue hypersensitivity and restoring the normal interplay of contraction/relaxation needed in the pelvic floor (5,6).

However, directing physical therapy treatment only to the painful pelvic tissues is limiting. Current pain science emphasizes the involvement of both the peripheral and central nervous systems when pain persists beyond three months (7). Thus, pelvic pain persisting beyond three months should be expected to result in the same sensitization and upregulation of peripheral inputs, reflecting a nociceptive barrage that is out of proportion to the state of health of the painful tissues. Central sensitization has been addressed for visceral and urogenic pain (8).We are in need of an evidence-based interdisciplinary assessment and treatment algorithm which includes the complexity of central sensitization and peripheral dysfunctions (9).

Physical Therapy in Persistent Pelvic Pain

Addressing both local tissue dysfunction and the probability of central sensitization at the beginning of the treatment process in persistent pelvic pain through neurophysiology-based education is supported by current pain science (7). Recognizing the contribution of central sensitization to persistent pelvic pain allows the patient to address the complexity of his or her presentation from the onset of treatment and make meaningful changes in both the painful tissues and the processing of the pain experience in his or her nervous system.

The main reasons for adding an understanding of neurophysiology to the treatment of persistent pelvic pain include the following (10):

1. Pain is an output expression of the brain in response to a perception of threat. A therapeutic goal in persistent pain is to restore movement without triggering a protective pain response.
2. Pelvic pain is complex. Psychosocial considerations include sexuality, cultural expectations, privacy, and religious issues.
3. Chronic pain does not necessarily correlate with injury or disease, and nociception is neither necessary nor sufficient for a pain response.
4. The nervous system is dynamic; it slides and glides as we move. In the pelvic region this involves lower thoracic, lumbar, sacral and sympathetic plexi. Peripheral nerve entrapments may contribute to sensitization.
5. Neurophysiology-based pain education is an effective adjunct to physical therapy intervention. Educating patients in the concepts of pain science, including neural plasticity, increases understanding and decreases the threat response.

Applying the lessons emerging from treatment of chronic back pain and Complex Regional Pain Syndrome (CRPS) to the persistent pelvic pain population is an intriguing prospect for relief. For example, therapeutic approaches to normalizing the cortical changes occurring with chronic pain in CRPS and other neuropathic pain syndromes have been shown to decrease pain (11-13). Discussions on body awareness and body ownership in patients with CRPS affecting the upper and lower limbs can be adapted to pelvic pain. For patients with persistent pelvic pain, as for those with chronic back pain, it may not be possible to visualize the affected area. Techniques such as graded

motor imagery, in which recognition of the affected area is followed by imagined movements, may be an interesting adaptation to pelvic floor treatment in physical therapy and with cognitive behavioral therapy.

Where do we go from here?

In my clinical practice, I see men and women who have been experiencing persistent pelvic pain for two years or longer, including coccyx pain, vulvar pain, pain with vaginal penetration, and pain in sitting. The definitions blur depending on the number and types of diagnoses the individual has received. Informal discussions with physiotherapists in the United States, Australia, New Zealand, Canada, Germany, and England reveal ongoing irregularities in diagnoses, definitions of diagnosis, and definitions of therapeutic techniques. Myofascial release is an example of the most used and least understood term with at least three distinct variations in delivery and minimal understanding of the mechanism by which the technique works. International organizations such as the International Association for the Study of Pain (IASP) and the International Pelvic Pain Society (IPPS) continue to advance and support standardization of definitions and further research towards effective practice patterns. In the meantime, there are men and women with significant functional loss, pain, and severe quality of life issues related to tissue dysfunction and likely psychoneuroimmune influences.

Increasing the awareness of the scope of persistent pelvic pain and getting those individuals to a qualified professional is a good place to start. These may include a pelvic health physical therapist, sexual therapist, psychologist, or cognitive behavioral therapist. Locate the urogynecologists and urologists who specialize in pelvic pain. Ask the difficult questions of your patients with an understanding that your own psychosocial history may promote a hesitancy to broach sensitive subjects and inadvertently contribute to the silence of persistent pelvic pain.

The diagnosis of a hypertonic pelvic floor requires an internal pelvic examination. Not all physical therapists are trained in how to do this. Therefore, it is important to ask the therapist if they have training and refer to a qualified specialist if they do not. The Section on Women's Health with the American Physical Therapy Association is a good place to start for information in locating therapists or finding evidence-based educational classes to broaden your own scope of practice as a physical therapist. ■

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