



The single most effective treatment for IC symptoms, pelvic floor physical therapy can be an integral part of the overall care plan.

By Francesca Swan, MPT, and Emma Hitt Nichols, PhD

For interstitial cystitis (IC) patients with pelvic floor dysfunction and muscle tenderness, physical therapy has much to offer with little downside.

Recognized as the most effective treatment for IC, the benefits of pelvic floor physical therapy have been validated by multiple studies. Research shows that the potential for pain relief from physical therapy is substantial, and an experienced therapist with specialty training and experience in pelvic floor rehabilitation can be a key ally on the road to recovery from this painful condition.

As well as offering expert treatment, Stephanie Prendergast, MPT, suggests that therapists are well-positioned to act as case managers for their patients. "Because physical therapists often spend at least one hour a week with patients, we can help them coordinate their doctors and other providers to make sure they are getting the treatments they need, as well as help them determine what is and isn't working, and why," says Prendergast, co-founder of Pelvic Health & Rehabilitation Services, based in Los Angeles, California, and co-author of the book *Pelvic Pain Explained*.

## A 'Vicious Cycle'

While the exact cause of IC remains unknown, researchers have identified several factors that may contribute to the development of IC. These include defects in the muscles of the pelvic floor, commonly called pelvic floor dysfunction. Contraction and relaxation of the pelvic floor muscles allows for the control of bladder and bowel movements. When pelvic floor dysfunction occurs, control of the muscles is no longer maintained, and these muscles become chronically tight, painful, and weak.

Hina Sheth, MPT, owner of Rebalance Physical Therapy in Narberth, Pennsylvania, and a pelvic health specialist, explains that in IC, the nerve signaling between the bladder, brain, and muscles surrounding the pelvic organs develops over time into a chaotic kind of crosstalk. "This faulty communication causes a change in the muscle tissue itself," she says. "The muscles get to a higher state of excitability, surrounding connective tissue gets tighter, and the resulting pain is referred back to the bladder. Then you're in a vicious cycle."

That vicious cycle contributes to pain symptoms for the majority of IC patients. "About 85 percent of patients with IC have pelvic floor problems that account for some amount of their pelvic pain," says Dr. Robert Moldwin, urologist and director of the Pelvic Pain Center at The Arthur Smith Institute for Urology, in Long Island, New York. The pelvic pain associated with IC comes from the bladder itself, the muscles and tissues surrounding and supporting the bladder, or both.

Trauma, chronic muscle tension, habitual urge suppression or voiding patterns, and decreased blood flow are just some of reasons affected muscles cause pain. "If a person's symptoms are mostly musculoskeletal in origin, physical therapy will be effective for them," says Prendergast.

Physical therapists began learning about and treating conditions unique to women and women's health in the early twentieth century. The therapy subspecialty known today as "women's health" has roots that go back at least a century (see sidebar, p. 8). What began as a role in caring for obstetric patients in the UK in the early 1900s has today evolved into a specialty area of physical therapy practice that includes obstetrics, gynecology, osteoporosis, lymphedema, sports medicine for women, female oncology rehabilitation, pelvic pain and chronic pain. With board certification (known as Women's Clinical Specialist, or WCS), the specialty continues to expand, and there's also growing recognition that physical therapy interventions in female patients may also be effective in men (see story, p. 18). For more on how to find a physical therapist who specializes in pelvic floor therapy, see the box below.

## The Physical Therapist's Role

Physical therapists who specialize in pelvic health have expertise in conditions associated with pelvic pain and experience with techniques that help restore the normal feeling and function of pelvic muscles. A skilled therapist will apply knowledge of the musculoskeletal system to the signs and symptoms their patients describe.

Physical therapy techniques, Prendergast says, may include manual therapy in the clinic, neuromuscular re-education, pain physiology education, and home exercises outside of the clinic.

Rhonda Kotarinos, DPT, is a researcher and author in the area of pelvic health, and is considered a pioneer of manual

therapy techniques for pelvic pain conditions. She reports that physical therapy techniques studied in clinical trials that have been shown to be effective for a majority of IC patients with pelvic floor dysfunction include connective tissue mobilization, myofascial/trigger point release, pelvic floor muscle re-education, neural mobilization, and behavior modification.

According to Kotarinos, connective tissue mobilization helps reverse the effects of decreased blood flow to muscle tissue. This happens in muscles that are always in a highly contracted state, or where there is frequent mechanical compression, for example when patients sit for prolonged periods or wear tight clothes that decrease circulation.

Trigger point release and myofascial release are accomplished through hands-on techniques that address painful focal points in a muscle or in the muscle sheath and surrounding connective tissue that can cause pain and altered functioning of the muscle. Depending on their severity, trigger points may also be injected to provide relief. This level of care is closely coordinated with a doctor, nurse practitioner, or physical therapist trained in the technique.

Patient education is also an important part of physical therapy. Physical therapists typically take a holistic approach with their patients, educating them about dietary triggers, stress management, and breathing techniques, and helping their patients to unlearn physical habits related to urge suppression and guarding against muscle pain. (For more on self-care, see p. 12.)

Physical therapists also can play a broader role in treatment. Prendergast notes that "an experienced pelvic health physical therapist will be able to pick up on overlapping gynecological, colorectal, GI, and pain disorders." Since patients with IC frequently have coexisting medical conditions, pelvic health therapists contribute useful information to the healthcare team in the ongoing care of these patients, she says.

## Finding a Pelvic Floor Physical Therapist

- Look for clinics that specialize in pelvic floor physical therapy. One place to start is ICA's Healthcare Provider Registry (www.ichelp.org/HealthcareProviderRegistry).
- Ask if the PT has the Women's Clinical Specialist (WCS) credential, whether you are male or female. Only several hundred PTs nationwide have this credential, however, so be aware that there may not be one in your area—and many experienced practitioners do not have the credential.
- Ask about relevant training or coursework—both APTA and the Herman & Wallace Pelvic Rehabilitation Institute offer education tracks.
- Ask questions: Some pelvic floor physical therapists focus largely on pregnancy and postpartum conditions. Does the physical therapist specialize in a broad range of pelvic pain conditions?

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