Fibromyalgia symptoms frequently perplex both patient and provider. Physical therapy has proven an effective first-line defense for this often misunderstood syndrome that has no cure, and disrupts personal, family and career lives of an estimated 5 million Americans age 18 or older, according to the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

Fibromyalgia carries a strong familial component, according to the NIAMS. Not considered arthritis, fibromyalgia doesn’t inflame or damage joints, muscles or tissues. But like arthritis, it is considered a rheumatic medical condition that causes chronic pain, tenderness, fatigue and other annoying symptoms that may come and go.

No magic pill exists for fibromyalgia pain, said Anne Reicherter, PT, DPT, PhD, associate professor in physical therapy and rehabilitation science at the University of Maryland School of Medicine, Baltimore. For female patients between ages 40 and 50, pain usually localizes to multiple trigger points in the upper and lower back, hips, shoulders and joints closest to the trunk.

Reicherter said she thinks patients can get "lost" in medical management, especially when misdiagnosed. "Chronic pain is wearing, so the earlier the intervention by..."
a PT, the better," she said. "Most patients are happy to just get through a normal day at home and work. That’s why they see us. They can’t do that alone."

A large retrospective cohort study published in the Journal of Clinical Rheumatology in 2006 found females are 1.64 times more likely to suffer from the condition, as cited by Jonathan C. Sum, PT, DPT, OCS, SCS, CSCS. Sum is director of the University of Southern California Physical Therapy Associates, Health Sciences Campus, and instructor of clinical physical therapy at USC.

The study’s authors found that patients with fibromyalgia were 2.14 to 7.05 times more likely to have one or more of the following comorbidities: anxiety, chronic fatigue syndrome, depression, headache, irritable bowel syndrome, rheumatoid arthritis and lupus.

A fibromyalgia patient also may have two or more of these chronic pain conditions (part of the "central sensitivity syndrome" group): vulvodynia, endometriosis, interstitial cystitis and temporomandibular joint dysfunction.

The first goal is to help decrease that pain, Sum said. "Additionally, an individualized exercise program designed by a licensed physical therapist, which is aimed at improving function and proper movement, is still the hallmark treatment for people with fibromyalgia."

**Easy Does It**

Patients need their rest, said Dana Dailey, PT, MS, and adjunct associate at the University of Iowa department of physical therapy and rehabilitation science in Iowa City. Dailey also is a PT at Genesis Outpatient Rehabilitation Services in Moline, Ill.

Because 70% of her patients have sleep disruptions, Dailey focuses first on sleep hygiene, adjusting the patient’s environment and setting a standard bed time.

Aerobic exercise is next, elevating respiration and heart rate as she monitors exertion rate. "Both land and water are effective, but the challenge is getting there with the deconditioned or sedentary patient when it’s very painful," said Dailey. "Gradual progression of exercise is important, for overdoing can increase their pain for two to three days."

Repetitive, relaxed movements of bigger muscle groups, as with walking and swimming, are integral to restoring "smooth movement" and getting the motor system recoordinated, said Jeffrey Thompson, MD, at Mayo Clinic’s physical medicine and rehabilitation department in Rochester, Minn. "Healthy muscles work in pairs — one contracting, one relaxing. In fibromyalgia, both contract at the same time, fighting each other as they hold tight."

Thompson’s treatments focus on general conditioning and endurance, rather than any specific exercise type, and, like Dailey, he goes slowly. "Ask patients about their goals, like function, rather than asking about pain," he said, with a nod to the team’s three-pronged approach that includes sleep, activity and cognitive
behavioral therapy.

Some people think fibromyalgia is "all in a patient’s head." Though untrue, there are changes in the brain that can be seen, according to a 2002 study published in the journal Arthritis & Rheumatism, said Thompson. A functional MRI scan revealed areas of the brain lighting up in fibromyalgia patients experiencing chronic pain.

Chronic pain — as opposed to acute pain — changes how the brain processes the uncomfortable feeling, Thompson said. In fact, with central sensitivity syndrome, patients often can’t tolerate sensory input, such as bright lights and strong smells. "CBT can actually reprogram the brain to reduce effects of pain," he said, since its goal is to counter self-defeating ideas and behaviors.

Treatment Options Abound

In her Newport Beach, Calif. practice, Kim Lawler-Coyle, PT, sometimes sees nearly half of her daily roster made up of fibromyalgia patients. In practice for 31 years, Lawler-Coyle starts by taking a comprehensive history to determine what initially set off the pain syndrome. "Did they experience multiple traumas? Did they have surgeries (causing scar tissue or adhesions)? Are they on antibiotics or other medications to which they’re hypersensitive? Were they exposed to chemicals?"

Lawler-Coyle employs myofascial release, craniosacral and lymphatic drainage techniques, and visceral manipulation, along with regular therapeutic exercise, as appropriate, she said.

Like Dailey, Lawler-Coyle understands that taking note of a patient’s day-to-day condition "can help keep them out of trouble." And, like Thompson, she approaches movement from a pain-free, tension-free perspective intent on re-educating the patient’s body from "a sound neuromuscular basis."

Although controlled clinical studies on aquatic physical therapy related to fibromyalgia are fairly sparse, plenty of evidence exists for its applicability, said Charlotte Norton, PT, DPT, ATC, CSCS, of Building Bridges physical therapy clinic in Sacramento, Calif.

"Especially in warmer water, the hydrostatic pressure of compression on the whole body helps reduce pain," Norton said. Citing the effects of buoyancy, she said patients experience 50% weight reduction if submerged up to hips, 70% if submerged to the xiphoid process and 90% if submerged to C7.

Resistance in water can also be self-controlled, which then helps control pain, said Norton, and that gives patients confidence to regain strength. Cardiovascular training in water obviously raises heart rate and even creates a physiological change as the brain releases hormones that aid the treatment process, she said.
"Imagine asking them to lift a 25-pound weight in the clinic," Norton said. "Work someone really hard and they might be in bed for a week. But remember we don’t live in water. Using your PT toolkit, your goal is a return to functioning on land."

Don’t ignore the small details, added Reicherter. "Assess how patients spend their time, even sitting: Is it a good position and posture in an ergonomically correct chair? What surface are they resting on?"

Choose from the diverse menu of alternative treatments, said Sum. "Yoga, tai chi, deep breathing exercises and recreational activities have also been shown to decrease pain and improve function."

Sum employs deep tissue massage, low-grade joint mobilizations, neuromuscular re-education, and more passive modalities, such as electrical stimulation, ultrasound, moist heat and cold packs. In addition to CBT, he likes to use meditation and biofeedback to help minimize negative responses to pain.

"The expected outcomes for people with fibromyalgia are quite variable due to the differences of nature and severity of symptoms," Sum said. "With an appropriately designed and individualized program, fibromyalgia symptoms can be controlled and function can improve. People with fibromyalgia can live normal, healthy lives not controlled by their condition." •

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