New thinking about fibromyalgia pain

By Yvonne D’Arcy, MS, CRNP, CNS

STEPHANIE PETERS*, 48, has been seeing her primary care provider off and on for several years with the same types of complaints: generalized, severe bilateral musculoskeletal pain at various anatomic sites, including her hips and shoulders. She has difficulty falling asleep and staying asleep, and says she’s fatigued and irritable at times. She also has some difficulty remembering things but just feels it’s a part of her busy lifestyle. Yesterday, a friend hugged her, causing Ms. Peters to scream in pain. You suspect she has fibromyalgia.

This patient’s pain has all the hallmarks of fibromyalgia pain—it’s chronic, widespread, and occurs above and below the waist and on both sides of her body. She also has a sleep disturbance and fatigue.

Allodynia and hyperalgesia

FMS is now being considered a neuropathic pain syndrome with a central amplification (or exaggerated response) of pain that produces allodynia (pain from a stimulus that’s not normally painful) and hyperalgesia (an exaggerated pain response to a mildly painful stimulus). FMS isn’t a musculoskeletal syndrome—the severe intensity of pain is the result of changes in pain transmission, high levels of substance P (a pain-facilitating substance) in the cerebrospinal fluid, and elevated nerve growth factor that alters sensory processing.

Because FMS can include several different comorbid conditions (see A fibromyalgia primer), patients can be difficult to diagnose. According to the National Fibromyalgia Association (http://www.fmaware.org), the average FMS patient sees four to six healthcare providers over 5 to 6 years before obtaining a definitive diagnosis.

The current diagnostic criteria for FMS are:

- chronic, widespread axial pain above and below the waist, affecting the right and left sides of the body, for more than 3 months
- pain in at least 11 of 18 tender points.

The condition occurs on a spectrum that ranges from mild to severe, with most patients falling into the moderate category: they may have some limitations on their daily activities, and occasional flares of pain, but most are employed and can manage their symptoms with medications and lifestyle modifications.

Expanding the diagnostic criteria

Because recent research has shed new light on FMS, the ACR has proposed augmenting the original diagnostic criteria to add a symptom severity (SS) scale score and a widespread pain index (WPI).

The SS scale score is derived from scoring the severity of fatigue, waking unrefreshed, and cognitive symptoms over the past week (using a 0 to
CONTROLLING PAIN

3 point scale), as well as the number of somatic symptoms in general; for example, headache, blurred vision, and muscle weakness (using another 0 to 3 point scale). The final SS scale score ranges from 0 to 12.

The WPI is scored based on the number of areas (not limited to the original 18 tender points) where the patient has had pain over the last week; the score will range from 0 to 19.

These are the new preliminary diagnostic criteria:
- WPI greater than or equal to 7 and an SS scale score greater than or equal to 5, or a WPI of 3 to 6 and an SS scale score of 9 or greater.
- Symptoms present at a similar level for at least 3 months.
- The patient doesn’t have another disorder that would explain the pain.2

The new diagnostic criteria don’t require a physical exam or a tender point exam, which is often performed incorrectly. Although fully incorporating these new criteria into clinical practice may take years, as an addition to the current tender point exam, they can help expand and increase the potential for diagnosing patients with FMS.

Treating FMS
Three medications are FDA-approved for reducing the pain of FMS:
- Pregabalin is a second-generation antiepileptic drug (AED) that binds to the alpha_2-delta site in central nervous system tissues, possibly decreasing calcium-dependent release of pronociceptive neurotransmitters in the spinal cord.
- Duloxetine is a selective serotonin and norepinephrine reuptake inhibitor (SNRI) used as an antidepressant. It exerts a central pain inhibitory action.8
- The American Pain Society’s fibromyalgia guidelines list other medications that have some evidence of efficacy: amitriptyline (not recommended for older patients because of its potential to cause orthostatic hypotension), cyclobenzaprine, tramadol, and fluoxetine. The prescriber may need to combine medications for better pain relief.

What patients need to know
Fibromyalgia can occur in patients of all ages, but most are between 20 and 55 when symptoms start. The limitations on lifestyle and living with a chronic, painful, and incurable condition can cause depression and frustration. Teach patients about the condition and what to expect. Answer their questions and teach them these ways to manage their condition:
- **Low-intensity exercise** that includes stretching can be very helpful. Yoga, walking, and pool therapy (exercises performed in water) can reduce stress on the body and relieve stiffness. Encourage patients to start slow and move up to two or three exercise sessions per week.9
- **Relaxation** can decrease stress and help patients relax. Teach patients how to use these techniques and support their use as part of the plan of care.9
- **Setting appropriate goals and expectations** can reduce frustration over limitations to activity. If patients set goals they can meet, they’ll feel a sense of accomplishment even if they can’t do everything they’d like to do.9
- **Hypnosis and biofeedback** can help to reduce pain and induce a highly relaxed state that can last for several hours.9

Ms. Peters’s healthcare provider diagnosed her with fibromyalgia and prescribed pregabalin and cyclobenzaprine for her pain. Although she can’t do everything she wants and still has some bad days, overall Ms. Peters is doing much better, and her family feels like things are getting back to normal. By understanding FMS and how to manage it, you can help your patients control their pain and improve their quality of life. ■

REFERENCES

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