

Fibromyalgia

Fibromyalgia is a chronic health condition characterized by widespread musculoskeletal pain accompanied by a range of other symptoms including fatigue, unrefreshing sleep, cognitive difficulties ("fibro fog"), mood disturbances (anxiety or depression), headaches, sensitivity to light, noise, temperature or touch and can significantly impact daily life. This condition affects an estimated 2% of adults (about 4 million people in the U.S.) and affects women more than men—by a ratio of about 7 to 9 women for every 1 man diagnosed (Wolfe, 2018). This disparity likely stems from a complex interplay of biological, hormonal, genetic, (it can run in the family), and social factors.

The exact cause of fibromyalgia is not fully understood but it's believed to involve abnormal processing of pain signals in the brain and nervous system, known as central sensitization, where the central nervous system amplifies pain signals. Patients experience hyperalgesia (heightened pain from painful stimuli) and allodynia (pain from normally non-painful stimuli) due to this sensitive pain response.

There is no blood test, imaging scan, or biomarker that can confirm fibromyalgia. This makes it a diagnosis of exclusion. A diagnosis is made by the doctor using their experiences and what the patient describes, based on the history of widespread pain (pain in all four quadrants* of the body for at least 3 months) and associated with symptoms, often using criteria from the American College of Rheumatology (Bidari,2018). This should be clearly noted: fibromyalgia is a real and debilitating condition, sometimes co-existing with other disorders but requiring its own tailored treatment. Incidentally, fibromyalgia was once called "fibrositis" and wasn't officially classified as a diagnosable condition by the World Health Organization until 1992

*The four quadrants of the body refer to the divisions of the abdomen, a vertical line down the middle and a horizontal line across the belly button.

Treatment Options

Currently there is no cure for fibromyalgia. Treatment focuses on symptom reduction and improving quality of life. Because fibromyalgia manifests itself with multifaceted symptoms such as pain, sleep trouble, fatigue and mood issues, an individualized multimodal treatment plan is recommended.

While some medications can help manage the pain symptoms of fibromyalgia, they have their limitations and doctors will, often, employ combination of pharmacological treatments. They might suggest a low-dose antidepressant at night for sleep and pain, plus an anticonvulsant for daytime pain. This option is a "start low and go slow" process, tailoring the medication to the patient's chief complaints for benefit versus side effects. It's not uncommon for patients to cycle through several medications to find a combination that provides relief (Bidari, 2018).



Other treatment options include exercise: aerobic and gentle strength training, cognitive-behavioral therapy (CBT) aiding patients to develop coping strategies for chronic pain, address insomnia and reduce stress associated with the symptoms. Sleep hygiene practices and gentle mind-body exercises, such as yoga and tai chi, have shown to be a benefit in many patients.

Because fibromyalgia is complex, a combination of therapies often yields the best results. For example, an exercise program to improve fitness and reduce pain plus a low-dose antidepressant at night to aide sleep can be effective. CBT and a support group is another multimodal approach. These are endorsed by guidelines – the European League Against Rheumatism 2036 – emphasizing non-pharmacologic therapies as initial treatment (Di Carlo,2020). Unfortunately, even with these treatment plans, many patients continue to have significant symptoms highlighting the need for additional tools. This has led many patients to explore complimentary therapies like acupuncture and massage.

Acupuncture and Electroacupuncture (DN-ET)

Acupuncture is thought to stimulate the nervous system to release natural pain-relieving chemicals (e.g., endorphins) and influence areas of the brain involved in processing pain (Vas,20180). Electroacupuncture is a variation where a mild electric current is applied through the acupuncture needles to provide a stronger or more sustained stimulation. This may engage the body's own pain-modulating systems, sending signals to the spinal cord and brain. This can trigger the release of neurotransmitters and hormones involved in pain inhibition, helping "reset" pain thresholds and promote a sense of well-being. A 2019 meta-analysis of random trials found that true acupuncture was significantly more effective than sham acupuncture in reducing pain and improving quality of life for patients (Zang,2019).

Acupuncture has become appealing because it does not cause side effects such as weigh gain, drowsiness or stomach upset. This makes it an attractive adjunct for patients who cannot tolerate additional medications. Acupuncture effects tend to be broad but particularly pronounced in certain areas. Pain reduction, improved sleep, less fatigue, and a better overall sense of well-belling are among the most consistently reported benefits.

Which Patients Are Affected and Benefit Most?

Patients with more severe symptoms and those who have not gained adequate relief from standard treatments are often good candidates. And it's worth noting that most fibromyalgia acupuncture studies have involved woman, simply because the condition is more prevalent in females. Women are more likely to seek medical help for chronic pain and report symptoms more openly, which could partially explain higher diagnosis rates. And there may be a genetic predisposition to fibromyalgia that expresses more commonly or strongly in women. Women's immune system response differs from men's, possibly leading to increased inflammation or altered nerve signaling (<u>Aparico,2012</u>). Historically speaking, there's also a diagnostic bias—fibromyalgia was long considered a "women's disorder," potentially



leading to underdiagnosis in men. As an aside, both Lady Gaga and Morgan Freeman have publicly revealed their developed symptoms of fibromyalgia.

Psychosocial & Cultural Complexities

Diagnostic labels and patient-doctor communication profoundly shape outcomes and can either help legitimize or marginalize patients. Many general practitioners are still undertrained in fibromyalgia or may not recognize it as a real, variable, and multisystemic syndrome thus leading to misdiagnosis. With training, healthcare providers can reduce diagnostic delays and improve care (Bidari, 2018). A gender bias still exists in that most patients are women, and some symptoms are dismissed or minimized (Malluru, 2025). In addition, fibromyalgia is considered a syndrome – a collection of symptoms with no single known cause – which makes it feel "less real" to some doctors or insurers. This stigma further complicates diagnosis.

Conclusion

Fibromyalgia is a challenging chronic pain disorder that requires a comprehensive, individualized approach. Standard treatments including certain medication and lifestyle interventions like exercise and CBT are the backbone of fibromyalgia management. Acupuncture and DN-ET have emerged as a valuable adjunctive therapy. This therapy is generally safe and well-tolerated and may tap into pathways drugs do not fully address and can play a significant role in easing the burden of fibromyalgia, helping patients move toward better pain control, improved sleep, and a fuller participation in daily activities.

Curated, compiled and written by Dr. Nathan J. Heide, DAOM, MBA, LAc and Rebecca Carsten in Eugene, Oregon to offer an insightful overview of the subject matter related to acupuncture and dry needling research.



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