



PAIN RELEASE

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FIBROMYALGIA: Fact, Not Fiction

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Fibromyalgia is a complex, chronic pain syndrome that has been historically difficult to diagnose and treat. The widespread, diffuse pain in the spine and throughout the body may be mistaken for arthritis, lupus, or muscle inflammation. Other common symptoms include aches, morning stiffness, chronic fatigue, and mood and sleep disturbances. The cause is unknown, but these symptoms suggest the presence of stress response abnormalities or chemical imbalances throughout the body.^{1, 2} Although no treatment guidelines currently exist, efforts to relieve these debilitating symptoms and improve the patient's quality of life include treatments such as a combination of medications and non-pharmacologic therapy (i.e., low intensity exercise), behavioral counseling, and patient education. Clearly, fibromyalgia is a condition without a cure, and pharmacotherapy is frequently required to manage the condition.³

Types of medication shown to be clinically *ineffective* are opioids and non-steroidal anti-inflammatory drugs (NSAIDs) while the most *effective* medications for fibromyalgia are anti-seizure and antidepressant agents that correct the imbalance of chemicals in the brain called neurotransmitters. Inadequate amounts of the neurotransmitters norepinephrine and serotonin, or increased levels of glutamate are responsible for many fibromyalgia symptoms; hence, they are targets for drug therapy.⁴ Currently, three medications are FDA approved for the treatment of fibromyalgia: pregabalin (Lyrica[®]), duloxetine (Cymbalta[®]), and milnacipran (Savella[®]).

Pregabalin is originally used to prevent and control seizures. By limiting the release of glutamate, which in excess precipitates seizures and pain, this medication provides significant relief in nerve disorders and fibromyalgia.³ Pregabalin can be taken with or without food, and some side effects include dizziness, blurry vision, weight gain, dry mouth and swelling.³ In addition, studies have demonstrated improved sleep patterns at doses of 150-450mg a day compared to placebo. Thus, pregabalin may be most beneficial in fibromyalgia patients who experience sleep disturbances as well as pain.

On the other hand, duloxetine is a medication used to treat depression, anxiety, and chronic pain. It increases serotonin and norepinephrine levels in the body and effectively blocks pain signals better than placebo at doses of 60mg daily. Some patients may experience nausea, dry mouth, constipation and decreased appetite, but the upset stomach subsides when taken with food. Clinical studies have illustrated that pain relief from duloxetine is independent of its antidepressant effects and as a result, is effective in treating fibromyalgia in patients with or without depression.

Milnacipran is the newest medication on the market for fibromyalgia. Like duloxetine, it increases serotonin and norepinephrine levels and exhibits similar side effects. However, milnacipran increases norepinephrine levels three times more than serotonin.²⁻⁴ In one study, 125 participants received either placebo, milnacipran 100mg daily, or milnacipran 100mg twice daily. At the completion of the 12-week trial, 37% of patients reported a decrease in pain intensity of at least 50% compared to 14% of patients taking placebo

($p < 0.05$). Participants in both arms of milnacipran therapy experienced significant improvements in fatigue, pain, and morning stiffness, while its effects on sleep disturbances were inconclusive.⁵ Furthermore, milnacipran is associated with less drug interactions, an advantage over duloxetine and pregabalin. Therefore, milnacipran may be considered in patients who are concurrently prescribed multiple medications.²

Finally, other agents, although not FDA approved, have established efficacy in modulating the pain associated with fibromyalgia. The most convincing evidence involves therapy with amitriptyline or cyclobenzaprine. The long-term use of these medications is limited by their side effects and narrow dosing window. Some side effects are dry mouth, constipation, decreased urination, and dizziness. Both medications are also not recommended for patients with heart, kidney, or liver disease.^{1,2} Tolerability can be ameliorated by initiating therapy at a low dose and slowly increasing these agents to reach target doses (amitriptyline 25-50mg daily, cyclobenzaprine 10-30mg daily). Ultimately, the clinician will determine whether the beneficial outcomes of these agents outweigh the potential for negative side effects.

Combining lifestyle changes with drug therapy is an effective way to decrease the symptoms of fibromyalgia. The decision to incorporate medications, exercise, or behavioral therapy in managing fibromyalgia requires collaboration among the patient, physician, physical therapist, behavioral health professional, and pharmacist.

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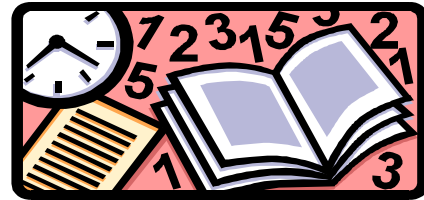
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Quote of the Month

I cannot say I am happy I was sick. But I am happy that sickness, if it had to happen, brought to where I am now. It is a better place than I have been before.

- Marilyn French
1929 – 2009
Author, feminist

EDUCATIONAL OPPORTUNITIES:



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- The **Chronic Pain Support Group** meets twice a month on the 2nd and 4th Tuesday from 5:00 to 6:30pm. This peer group focuses on education; bringing new thinking to what chronic pain patients *can do* to more fully engage in life. Scheduled speakers include:

April 13th Dr. Paul Finn, Professor and Chair, St. Anselm's College will speak on "*Chronic Pain – On Being Fully Human*"

April 27th Andy Wegman, Licensed Acupuncturist and principal at Manchester Acupuncture Studio will speak to the benefits to acupuncture in treating chronic pain.

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