

PAIN RELIEF / PREVENTION

Understanding Fibromyalgia

Alejandro Katz, MD, OMD, LAc, QME

Fibromyalgia is one of the most common rheumatic conditions of unknown etiology. Treatment is generally unsatisfactory. It is a chronic condition characterized by fatigue and widespread pain in the fibrous tissues of the muscles, ligaments and tendons. Previously, the condition was known by other names such as fibrositis; chronic muscle pain syndrome; psychogenic rheumatism; and tension myalgias.

Symptoms of fibromyalgia can vary, depending on weather; stress; physical activity; or just the time of day. Common signs and symptoms include:

- Widespread pain. Pain may occur in specific areas of the body when pressure is applied to them. These areas may include the back of the head; the upper back and neck; the upper chest; and the elbows, hips and knees. The pain generally persists for months and is often accompanied by stiffness.
- Fatigue and sleep disturbances. People with fibromyalgia often wake up tired and unrefreshed, even though they seem to get plenty of sleep. Studies suggest this problem is caused by a sleep disorder called "alpha wave interrupted sleep pattern," a condition in which deep sleep is frequently interrupted by bursts of brain activity similar to wakefulness, so people with fibromyalgia miss the deep restorative stage of sleep.
- Irritable bowel syndrome (IBS). About 40 percent to 70 percent of people with fibromyalgia experience the constipation, diarrhea, abdominal pain and bloating associated with IBS.
- Chronic headaches and facial pain. Half of the people who have fibromyalgia also have recurrent migraine or tension-type headaches that may be related to tenderness in the neck and shoulders. Up to 90 percent experience jaw and facial pain.
- Heightened sensitivity. About 50 percent of people with fibromyalgia report being sensitive to odors, noises, bright lights, various foods and changes in weather.
- Numbness or tingling sensations in the hands and feet.
- Difficulty concentrating and mood changes.
- Chest or pelvic pain.
- Irritable bladder.
- Dry eyes and mouth.
- Dizziness.
- Sensation of swollen hands and feet.

Studies show there isn't a single cause of fibromyalgia; rather, a number of factors may contribute. These may include:

• Chemical changes in the brain. Studies suggest some people with fibromyalgia have alterations in the regulation of certain brain chemicals called neurotransmitters. This may be particularly true of serotonin - which is linked to depression, migraines and gastrointestinal distress - and substance P, a brain chemical associated with pain, stress and anxiety, as well as depression.

- Sleep disturbances.
- Injury. An injury to the upper spinal region has been shown to trigger the development of fibromyalgia in some people.
- Infection. Some researchers believe that a viral or bacterial infection may trigger fibromyalgia.
- Abnormalities of the sympathetic nervous system. The autonomic nervous system is divided into the sympathetic and parasympathetic systems. The sympathetic nervous system releases norepinephrine and influences the release of epinephrine from the adrenal gland. The sympathetic nervous system controls bodily functions that are not consciously controlled, such as heart rate; blood vessel contraction; sweating; salivary flow; and intestinal movements. There are reports of reduced epinephrine responses to low blood sugar levels and exercise.

Approximately two percent of Americans have fibromyalgia. Diagnosing fibromyalgia is difficult because there isn't a specific laboratory test for it. Before receiving a diagnosis of fibromyalgia, we go through several medical tests, such as blood tests and X-rays, only to have the results come back normal. Although these tests may rule out other conditions, they can't confirm fibromyalgia.

The American College of Rheumatology in 1990 established some general classification guidelines for fibromyalgia to help in the assessment and study of the condition. These guidelines are used on patients who have widespread aching for at least three months and have a minimum of 11 of 18 locations in the body that are abnormally tender under relatively mild pressure. In our experience, these criteria are too rigid. A patient can have fibromyalgia even if he or she doesn't meet the required number of tender points.

Some medications can help reduce the pain of fibromyalgia and improve sleep. The ones most commonly recommended are:

- Aspirin, ibuprofen (Advil, Motrin) or acetaminophen (Tylenol). These over-the-counter pain relievers may be used to treat the pain and stiffness caused by fibromyalgia. However, their effectiveness varies with different individuals, and in studies, they haven't been shown to be effective. In addition, frequent or long-term use of aspirin and ibuprofen can cause serious side-effects, including stomach pain, bleeding or ulcers. Overuse of acetaminophen may lead to kidney or liver damage.
- Antidepressants. The doctor may prescribe antidepressant medications, such as amitriptyline (Elavil); nortriptyline (Pamelor); trazodone (Desyrel); or doxepin (Sinequan) to help promote sleep. Side-effects of antidepressants include dry eyes and mouth, constipation and increased appetite.
- Muscle relaxants. Cyclobenzaprine (Flexeril) given at bedtime has been shown to be helpful.

Prescription sleeping pills may provide short-term benefits for some people with fibromyalgia, but long-term use of these drugs is usually not advised. These medications tend to work for only a short time, after which the body becomes resistant to their effects. Ultimately, the use of sleeping pills tends to create even more sleeping problems in people with fibromyalgia.

Narcotics usually aren't recommended for fibromyalgia because of the potential for dependence and addiction. Corticosteroids, such as prednisone, have not been shown to be effective in fibromyalgia because it isn't an inflammatory condition.

Self-care is critical in the management of fibromyalgia. Important aspects of self-care include taking these steps:

- Reduce stress. Develop a plan to avoid or limit overexertion and emotional stress. However, people who guit work or drop all activity tend to do worse than those who remain active.
- Get enough sleep. Because fatigue is one of the main effects of fibromyalgia, getting sufficient sleep is essential.
- Exercise regularly. At first, exercise may increase the pain, but doing it regularly often improves symptoms. Appropriate exercises include walking; swimming; biking; and water aerobics (at least 20 to 30 minutes of exercise four or more times a week). Stretching, good posture and relaxation exercises are also helpful.
- Maintain a healthy lifestyle. Eat a balanced diet, limit your caffeine intake, work on smoking cessation, get adequate rest, and do something that is enjoyable and fulfilling.

Besides dealing with the pain and fatigue of fibromyalgia, we (doctors and patients) also have to deal with the frustration of having a condition that has no visible symptoms and is often misunderstood.

Complementary and alternative therapies in the areas of pain and stress management are well-documented. Their use has become more popular in recent years, especially in people who have chronic illnesses, such as fibromyalgia.

- Acupuncture. According to the National Institutes of Health, "...acupuncture to help control pain associated with fibromyalgia may be effective...".
- Fibromyalgia and exercising. Studies demonstrated the benefits of graded exercise therapy (minimum of six months). Exercises included treadmill walking and bicycling up to 25 minutes, twice a day, at a pace that the patient could talk but would still "sweat slightly." (Source: *The Pain Clinic* October/November 2002)

MARCH 2003