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Fibromyalgia

WHAT IS FIBROMYALGIA?

Fibromyalgia is a common condition associated with muscular pain, fatigue and mood changes. Fibromyalgia affects about two percent of the U.S. population, and it occurs more commonly in women than in men. The cause of fibromyalgia is unknown.

Fibromyalgia is a form of chronic pain syndrome or soft-tissue rheumatism, which are broad terms used to describe a group of disorders that cause pain and stiffness around the joints and in muscles and bones. However, fibromyalgia can also occur in people with various forms of arthritis or related diseases such as rheumatoid arthritis or lupus.

Fibromyalgia cannot be diagnosed with laboratory tests. The results of X-rays and blood tests are normal. Therefore, the diagnosis is based on a careful history and physical examination.

In 1990, the American College of Rheumatology (ACR), an organization of approximately 7,000 rheumatologists (specialists in musculoskeletal diseases and immune disorders) and other arthritis health professionals, developed a definition of fibromyalgia. According to the

ACR classification, a person has fibromyalgia if he or she has a history of widespread, allover pain of at least three months' duration and abnormal pain sensitivity in at least 11 of 18 specific sites on the body that are called "tender points" (see page 2). Tender points are areas of the body that are painful when pressed.

SYMPTOMS AND SIGNS Pain

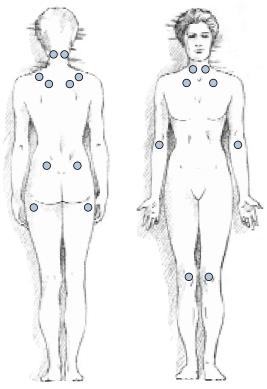
Widespread musculoskeletal pain is the most common symptom of fibromyalgia. It generally occurs at multiple sites throughout the body, although it may start in one region, such as the neck and shoulders, and spread to other locations over a period of time.

Fibromyalgia pain has been described in a variety of ways, such as burning, gnawing, aching, stiffness or soreness. It often varies according to time of the day, activity level, weather, sleep patterns and stress. Most people with fibromyalgia say that some degree of pain always is present. They feel the pain mainly in their muscles. For some people the pain may be quite severe.

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Although the results of a general physical examination usually are normal and individuals may look healthy, a specific examination for tenderness reveals pain in response to low levels (less than 4 kilograms) of pressure at a number of tender points. However, many people with this condition have tenderness throughout their body.

The tender points associated with fibromyalgia are similar in location to the tender areas



The dots in this figure indicate the various locations of tender points. People who have fibromyalgia experience undue tenderness when pressure is applied to many of these locations.

present in other common types of muscle and bone pain, such as tennis elbow (lateral epicondylitis). A tender point on one side of the body usually has a matching tender point in the same place on the opposite side of the body.

Although the tender points illustrated are common ones, many other muscles and areas

of soft tissue can be painful as well. People often are not aware of the presence of many of these tender points until a doctor performs a tender point evaluation.

Fatigue and Sleep Disturbances

Most people with fibromyalgia have fatigue, decreased endurance or the kind of exhaustion felt with the flu or lack of sleep. Sometimes the fatigue is severe and a much greater problem than the pain.

People with fibromyalgia may have fatigue that is similar to another condition called chronic fatigue syndrome (CFS). The Centers for Disease Control and Prevention developed criteria for diagnosing CFS. To be diagnosed with CFS, a person must experience at least six months of severe fatigue that is not produced by other medical conditions, plus four of the eight following symptoms:

- difficulty thinking clearly
- sore throat
- tender lymph nodes
- · muscle aches
- joint aches
- headache
- sleep disorders
- malaise lasting more than 24 hours after exertion

You can see how some people with fibromyalgia also may fit the definition of CFS and vice versa. Because of the similar symptoms of these two conditions, some experts think they are either related or variations of the same disorder.

Most people with fibromyalgia experience sleeping problems. Although they typically are able to fall asleep without much difficulty, they sleep lightly and wake up frequently during the night.



They often wake up feeling tired, even after sleeping through the night. The tiredness can range from listlessness and decreased endurance to exhaustion and can vary from one day to the next.

Research has shown that a disruption of a phase of sleep called "deep" sleep alters many crucial body functions, such as the production of chemicals needed by muscle tissue, as well as how a person perceives pain. Some researchers think sleep problems may be a cause of fibromyalgia. This theory needs more study, but it is clear that sleep problems can aggravate fibromyalgia symptoms.

Tips for Improving Your Sleep

- Make your bedroom as comfortable and as quiet as possible. Invest in a good mattress.
 Maintain a comfortable room temperature.
- Use your bedroom only for sleeping and for being physically close to your partner.
- · Avoid caffeine or alcohol before bedtime.
- Take a warm bath before going to bed.
- Avoid long naps. If a nap is needed to get you through the day, keep it short and schedule it well in advance of your bedtime.
- Read before bedtime if you like, but avoid suspenseful, action-filled novels or work-related material that can preoccupy your thoughts and cause a poor night's sleep.
- Eat a light snack before bedtime. You should not go to bed hungry, nor should you feel too full.
- · Set aside time before bed for relaxation.

Mood and Concentration Symptoms

Changes in mood are a common symptom of fibromyalgia. Feelings of sadness or being down are common, and some people with fibromyalgia have depression. People with fibromyalgia also may feel anxious. Some researchers think there is a link between fibromyalgia and certain forms of depression and chronic anxiety. However, any person with a chronic illness – not just fibromyalgia – may feel depressed at times while struggling with their pain and fatigue.

People with fibromyalgia may have difficulty concentrating or performing simple mental tasks. These problems tend to come and go and are often most prominent at times of extreme fatigue or anxiety. Similar problems have been noted in many people with mood changes, sleep disturbances or other chronic illnesses.

Other Problems

Headaches, especially tension headaches and migraine headaches, are common in people with fibromyalgia. Fibromyalgia may also be associated with pain of the jaw muscles and face (called temporomandibular disorder). Abdominal pain, bloating and alternating constipation and diarrhea (called irritable bowel syndrome or spastic colon) also are common. Bladder spasms and irritability may cause frequent urination or the urge to urinate.

Additional problems that may be associated with fibromyalgia include dizziness, restless legs, endometriosis and numbness or tingling of the hands and feet.

HOW IS FIBROMYALGIA DIAGNOSED?

Fibromyalgia is diagnosed by the presence of widespread muscle pain in combination with tenderness (abnormal pain sensitivity) in response to low levels of pressure stimulation at most of the specific locations shown on page 2.

There is no laboratory test or X-ray that can help a doctor diagnose fibromyalgia. But laboratory tests can help to diagnose other medical



problems that can mimic fibromyalgia. For example, an underactive thyroid (hypothyroidism) causes many of the same symptoms as fibromyalgia. A doctor can order a simple blood test, however, to determine if a person has this thyroid problem. A physical examination can rule out other conditions that may cause chronic pain and fatigue.

Because the symptoms of fibromyalgia are so general and often bring to mind other medical disorders, many people undergo complicated and often repeated evaluations before they are diagnosed with fibromyalgia. It is important to see a physician or rheumatologist who knows how to diagnose and treat the condition.

WHAT CAUSES FIBROMYALGIA?

No one knows what causes fibromyalgia. Researchers suspect that many different factors, alone or in combination, may contribute to the development of fibromyalgia. For example, factors such as an infectious illness, physical trauma, emotional trauma or hormonal changes may trigger the development of generalized pain, fatigue and sleep disturbances that characterize the condition.

Studies have suggested that people with fibromyalgia have abnormal levels of several different chemicals in their blood or cerebrospinal fluid that help transmit and amplify pain signals to and from the brain. There also is evidence that the central nervous system's ability to inhibit pain is impaired in these people. Whether these abnormalities are a cause or a result of fibromyalgia is unknown.

HOW IS FIBROMYALGIA TREATED?

Your doctor can create a treatment plan specifically for you. Some people with

fibromyalgia have mild symptoms, and need very little treatment once they understand what fibromyalgia is and how to avoid what worsens their condition. Other people, however, require a comprehensive care program, involving medication, exercise and pain coping skills training.

Treatment options for fibromyalgia include:

- · medications to diminish pain and improve sleep;
- exercise programs that stretch muscles and improve cardiovascular fitness;
- relaxation techniques to ease muscle tension and anxiety; and
- educational programs to help you understand and better manage the symptoms of fibromyalgia.

Medications

Modest doses of nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin or ibuprofen, or of analgesics, such as acetaminophen or tramadol (*Ultram*), may provide some pain relief.

A subcategory of NSAIDs called COX-2 inhibitors, such as celecoxib (*Celebrex*) and rofecoxib (*Vioxx*), also may provide pain relief but with fewer stomach side effects than traditional NSAIDs.

Severe pain can sometimes be treated with anticonvulsant medications such as gabapentin (*Neurontin*). Most doctors do not prescribe narcotic pain relievers or tranquilizers except for the most severe cases of fibromyalgia.

Medications that promote sleep and relax muscles help many people with fibromyalgia get more rest.

Doctors also may prescribe medications commonly known as antidepressants to treat fibromyalgia. These drugs work by elevating the lev-



els of serotonin and norepinephrine in the brain and spinal cord. Low levels of serotonin and norepinephrine are linked not only to clinical depression but also to the pain sensitivity and sleeping problems associated with fibromyalgia. These antidepressants, which are typically prescribed at lower doses than those used to treat major depression, have been shown to reduce pain in people with fibromyalgia and thereby may improve the chance of a good night's sleep.

There are two major classes of antidepressants: tricyclics, such as amitriptyline (Elavil), nortriptyline (Pamelor) and doxepin (Sinequan); and selective serotonin reuptake inhibitors, or SSRIs, such as fluoxetine (Prozac), paroxetine (Paxil) and sertraline (Zoloft). A drug called cyclobenzaprine (Flexeril), classified as a muscle relaxant but similar to an antidepressant, sometimes is prescribed.

There also is a new class of dual-acting reuptake inhibitors, such as venlafaxine and nefazodone, that act on two neurotransmitters involved in pain inhibition, serotonin and norepinephrine. These medications have not been studied as extensively as the tricyclics and SSRIs; however, studies of these medications have produced positive results in people with CFS.

Although many people sleep better and have less discomfort when they take antidepressants, the degree of improvement varies greatly from person to person. These medications may have side effects such as daytime drowsiness, constipation, dry mouth and increased appetite. Some SSRIs may actually make sleeping difficult. These side effects rarely are severe, but they can be disturbing. Some studies have suggested that combining tricyclic antidepressants with SSRIs may increase the benefits of each

drug while the side effects of each drug cancel each other out.

Exercise and Physical Therapy

Exercise is an extremely important aspect of the management of fibromyalgia. Exercises help to stretch tight, sore muscles and to increase cardiovascular (aerobic) fitness. Studies show certain aerobic exercise programs give people with fibromyalgia an improved sense of well-being, increased endurance and decreased pain.

Pilates, stretching and isometric exercises (exercises in which you tighten your muscles without moving your joints) are good exercises for people with fibromyalgia.

Isotonic exercises (exercises in which you strengthen muscles through resistance) working the upper extremities, particularly weight lifting and rowing, are not recommended.

You may be reluctant to exercise if you are already tired and in pain. Low- or non-impact aerobic exercises, such as walking, biking, water aerobics or swimming, generally are the best ways to start such a program. However, it is important to begin exercising at a level that you can tolerate without a substantial increase in pain. Many people with fibromyalgia find it necessary to consult with an experienced physical therapist for best results.

Begin slowly. You can start by exercising five minutes, three times a day, to get a total of 15 minutes for that day. Over a period of time, try to extend the endurance part of your exercise program to get a total of 30 minutes each day you exercise. Exercise every other day, if possible, and gradually increase your activity to reach a better level of fitness.

Gently stretch your muscles and move your joints through their range of motion daily, and



before and after exercise. Physical therapists can help you by designing a specific exercise program to improve posture, flexibility and fitness.

Coping Skills

Many people can benefit from learning how to better cope with and gain control over pain. Pain coping strategies include learning muscle relaxation, meditation or biofeedback skills. In addition, some cognitive coping strategies can help you better control feelings of being overwhelmed by the pain and the stress associated with fibromyalgia.

Stress management techniques, such as alternating periods of activity with periods of rest and breathing exercises, can help you control the feelings of anger, sadness and panic that often overwhelm people living with frequent pain and fatigue.

Learning pain control and stress management techniques often requires help from health professionals. The research studies published thus far on pain coping skills for fibromyalgia suggest that the strategies may work best if they are tailored to fit the needs of individual patients.

MANAGING FIBROMYALGIA

Frequently, people with fibromyalgia have undergone many tests and have seen several specialists in their search for answers. They often are told that because they look well and their tests are normal, there is nothing wrong with them. Their family and friends, as well as physicians, may doubt the reality of their complaints, increasing their feelings of isolation, guilt and anger.

You and your family should understand that fibromyalgia causes chronic pain and fatigue. You must take an active role in managing your fibromyalgia by exercising regularly, educating yourself about your condition and learning how to implement relaxation techniques and stress management strategies.

Fortunately, fibromyalgia is not life threatening and does not lead to muscle or joint damage. Although symptoms may vary in intensity, the overall condition rarely worsens over time. In a small study that traced how people with fibromyalgia felt 10 years after diagnosis, the study authors found that although symptoms may persist, many people felt better with treatment and time.

While nine out of 10 people with fibromyalgia work full-time, 30 percent have had to change jobs, and 30 percent have changed their job description. Some people with fibromyalgia have such severe symptoms that they are unable to function well at work or socially. These individuals may require greater attention in a program, such as a multi-disciplinary pain center, that utilizes physical or occupational therapists, social workers, nurses, mental health professionals, rehabilitation counselors and sleep specialists. Your primary care doctor or rheumatologist can refer you to a pain center or similar program.

RESEARCH

Arthritis Foundation-funded research is helping to increase understanding of the role of neurological and psychological factors in fibromyalgia, which could help lead to advances in treatment. Studies funded by the Arthritis Foundation are also evaluating coping interventions to help people with fibromyalgia take control of their disease as well as evaluating the role of treatment options including exercise, medications, and complementary and alternative therapies in fibromyalgia.



THE ARTHRITIS FOUNDATION

The mission of the Arthritis Foundation is to improve lives through leadership in the prevention, control and cure of arthritis and related diseases.

The Arthritis Foundation supports research with the greatest potential for advances and has invested more than \$320 million in these efforts since its inception in 1948. Additionally, the Arthritis Foundation supports key public policy and advocacy efforts at a local and national level in order to make a difference on behalf of 70 million people living with arthritis.

As your partner in taking greater control of arthritis, the Arthritis Foundation also offers a large number of programs and services nationwide to make life with arthritis easier and less painful and to help you become an active partner in your own health care.

Contact us at (800) 283-7800 or visit us on the Web at www.arthritis.org to become an Arthritis Advocate or to find out how you can become involved.

The Arthritis Foundation acknowledges with appreciation Laurence A. Bradley, PhD, Professor of Medicine, University of Alabama at Birmingham; Daniel J. Clauw, MD, Professor of Medicine, University of Michigan, Ann Arbor; Leslie J. Crofford, MD, University of Michigan, Ann Arbor; Alverna Jenkins, MSW, MEd, Childrens Hospital Medical Center, Cincinnati; and Daniel Wallace, MD, Cedars-Sinai/UCLA School of Medicine, Los Angeles, for their assistance with this booklet.

For more information: The Arthritis Foundation offers a wide variety of books, brochures and videos about different forms of arthritis, treatment and self-management techniques to help you take control of your arthritis. To order any of these products, become an Arthritis Foundation member or to subscribe to the Arthritis Foundation's award-winning consumer health magazine, Arthritis Today, call (800) 283-7800. Call or visit our Web site (www.arthritis.org) to find out how you can take control of your arthritis and start living better today!

This brochure has been reviewed by the AMERICAN COLLEGE OF RHEUMATOLOGY.



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