Fibromyalgia is a common health problem that causes widespread pain and tenderness (sensitive to touch). The pain and tenderness can tend to come and go, and move about the body. Most often, people with this chronic (long-term) illness are fatigued (very tired) and have sleep problems. It can be hard to diagnose fibromyalgia.

**FAST FACTS**
- Fibromyalgia affects two to four percent of people, mostly women.
- Doctors diagnose fibromyalgia based on all the patient’s relevant symptoms (what you feel), no longer just on the number of tender points.
- There is no test to detect this disease, but you may need lab tests or X-rays to rule out other health problems.
- Though there is no cure, medications can relieve symptoms.
- Patients will feel better with proper self-care, such as exercise and getting enough sleep, and stress management.

**WHAT IS FIBROMYALGIA?**
Fibromyalgia is a chronic health problem that causes pain all over the body and other symptoms as noted below. Symptoms patients most often have are:
- Tenderness to touch or pressure affecting joints and muscles
- Diffuse aching in the muscles or bones (“I feel like I have the flu”)
- Localized intense shooting pain lasting seconds but can be recurrent, these “lightning pains” often migrate
- Fatigue
- Sleep problems (waking up unrefreshed)
- Problems with memory or thinking clearly
- Temperature insensitivity

Some patients also may have:
- Depression or anxiety
- Migraine or tension headaches
- Digestive problems: irritable bowel syndrome (commonly called IBS) or gastroesophageal reflux disease (often referred to as GERD)
- Irritable or overactive bladder
- Pelvic pain
- Temporomandibular disorder—often called TMJ (a set of symptoms including face or jaw pain, jaw clicking and ringing in the ears)

Symptoms of fibromyalgia and its related problems can vary in intensity, and will wax and wane over time. Stress often worsens the symptoms.

**WHAT CAUSES FIBROMYALGIA?**
The causes of fibromyalgia are unclear. They may be different in different people. Fibromyalgia may run in families. There likely are certain genes that can make people more prone to getting fibromyalgia and the other health problems that can occur with it. Genes alone, though, do not cause fibromyalgia. Fibromyalgia is not an autoimmune disease.

There is most often some triggering factor that sets off fibromyalgia. It may be spine problems, arthritis, injury, infection, or other type of physical stress. Emotional stress and trauma also may trigger this illness. The result is a change in the way the body “talks” with the spinal cord and brain.
Levels of brain chemicals and proteins may change causing pain processing center in the brain to be overworked. In other words, the brain has a “volume control” for how intensely you feel pain throughout the body. That volume control is turned up in fibromyalgia. Stress, lack of sleep, overexertion, infections can all turn that volume control up. Exercise, sleep improvement, stress management and some medications can help turn DOWN the volume control.

**WHO GETS FIBROMYALGIA?**

Fibromyalgia is most common in women, though it can occur in men. It most often starts in middle adulthood, but can occur in the teen years and in old age. Younger children can also develop widespread body pain and fatigue.

You are at higher risk for fibromyalgia if you have a rheumatic disease (health problem that affects the joints, muscles and bones). These include osteoarthritis, lupus, rheumatoid arthritis, or ankylosing spondylitis.

**HOW IS FIBROMYALGIA DIAGNOSED?**

A doctor will suspect fibromyalgia based on your symptoms. Doctors may require that you have tenderness to pressure or tender points at a specific number of certain spots before saying you have fibromyalgia, but these spots are not required to make the diagnosis (see the Box). A physical exam can be helpful to detect tenderness and to exclude other causes of muscle pain.

There are no diagnostic tests (such as X-rays or blood tests) for this problem. Yet, you may need these tests to rule out another health problem that can be confused with fibromyalgia. Because widespread pain is the main feature of fibromyalgia, health care providers will ask you to describe your pain. This may help tell the difference between fibromyalgia and other diseases with similar symptoms. For instance, hypothyroidism (underactive thyroid gland) and polymyalgia rheumatica sometimes mimic fibromyalgia. Yet, certain blood tests can tell if you have either of these problems. Sometimes, fibromyalgia is confused with rheumatoid arthritis or lupus. But, again, there is a difference in the symptoms, physical findings and blood tests that will help your health care provider detect these health problems. Unlike fibromyalgia, these rheumatic diseases cause inflammation in the joints and tissues.

**Criteria Needed for a Fibromyalgia Diagnosis**

1. Pain and symptoms over the past week, based on the total of: Number of painful areas out of 18 parts of the body Plus level of severity of these symptoms:
   - Fatigue
   - Waking unrefreshed
   - Cognitive (memory or thought) problems
   Plus number of other general physical symptoms

2. Symptoms lasting at least three months at a similar level

3. No other health problem that would explain the pain and other symptoms

Source: American College of Rheumatology, 2010
HOW IS FIBROMYALGIA TREATED?

There is no cure for fibromyalgia. However, symptoms can be treated with both medication and non-drug treatments. Many times the best outcomes are achieved by using multiple types of treatments as detailed below.

1-Sleep Improvement—Improved quality of sleep and not just quantity are crucial to improvement of fibromyalgia symptoms. Good sleep hygiene is often not enough and medications are utilized to help improve sleep quality. Sleep quality refers to how you feel when you awaken, refreshed or do you feel as though you never slept?

2-Exercise—The closest thing to a cure for fibromyalgia is regular and sustained exercise. Exercise enables all other treatments to work better at treating your symptoms. It may seem that you can’t exercise because you are too tired or it makes you worse—this is not so. Nearly all patients with fibromyalgia can begin a graded exercise program which helps nearly every patient who diligently adheres to it. Many will need to start low and go slow perhaps as little as 5 minutes per day and work up to the goal of 30 minutes per day, 5-6 days per week. Moderate intensity cardiovascular exercise is best such as walking briskly, jogging, stationary or regular bike, recumbent bike, or pool therapy/swimming. Moderate intensity is defined at the end of this handout. Exercise is the best treatment for this condition.

3-Depression/Anxiety—Depression and anxiety commonly accompany fibromyalgia. Uncontrolled emotions and periods of emotional stress can make fibromyalgia worse. Treatments for depression and anxiety have proven helpful for the symptoms of fibromyalgia including counseling and medications for mood stabilization. Please consult with your primary care physician if you feel your depression or anxiety are not controlled well enough.

4-Medications: The U.S. Food and Drug Administration has approved three drugs for the treatment of fibromyalgia. They include two drugs that change some of the brain chemicals (serotonin and norepinephrine) that help control pain levels: duloxetine (Cymbalta) and milnacipran (Savella). Older drugs that affect these same brain chemicals also may be used to treat fibromyalgia. These include amitriptyline (Elavil), cyclobenzaprine (Flexeril) or venlafaxine (Effexor). Side effects vary by the drug. Ask your doctor about the risks and benefits of your medicine.

The other drug approved for fibromyalgia is pregabalin (Lyrica). Pregabalin and another drug, gabapentin (Neurontin), work by blocking the overactivity of nerve cells involved in pain transmission. These medicines may cause dizziness, sleepiness, swelling and weight gain.

Though not recommended as the first treatment, tramadol (Ultram) may be used to treat fibromyalgia pain. This painkiller is an opioid narcotic. Doctors do not suggest using other opioids for treating fibromyalgia. This is not because of fears of dependence. Rather, evidence suggests these drugs are not of great benefit to most people with fibromyalgia. In fact, they may cause greater pain sensitivity or make pain persist.

In some cases, fibromyalgia pain can improve with use of over-the-counter medicines such as acetaminophen (Tylenol) or nonsteroidal anti-inflammatory drugs (commonly called NSAIDs) like ibuprofen (Advil, Motrin) or naproxen (Aleve, Anaprox). Yet, these drugs likely treat the pain triggers, rather than the fibromyalgia pain itself. Thus, they are most useful in people who have other causes for pain such as arthritis.
For sleep problems, some of the medicines that treat pain also improve sleep. These include cyclobenzaprine (Flexeril), amitriptyline (Elavil), gabapentin (Neurontin) or pregabalin (Lyrica). It is not recommended that patients with fibromyalgia take sleeping medicines like zolpidem (Ambien) or benzodiazepine medications.

Other Therapies: People with fibromyalgia should use non-drug treatments as well as any medicines their doctors suggest. Research shows that gentle body-based therapies including Tai Chi and yoga can ease fibromyalgia symptoms.

Cognitive behavioral therapy (a type of therapy focused on behavior change and positive thinking) can help redefine your illness beliefs. Also, through learning symptom reduction skills, you can change your behavioral response to pain. These therapies can be very helpful in improving symptoms.

Other complementary and alternative therapies (sometimes called CAM or integrative medicine), such as acupuncture, chiropractic and massage therapy, can be useful to manage fibromyalgia symptoms. Many of these treatments, though, have not been well tested in patients with fibromyalgia.

LIVING WITH FIBROMYALGIA
Even with the many treatment options, patient self-care is vital to improving symptoms and daily function. In concert with medical treatment, healthy lifestyle behaviors can reduce pain, increase sleep quality, lessen fatigue and help you cope better with fibromyalgia.

Here are some self-care tips.

- **Make time to relax each day.** Deep-breathing exercises and meditation will help reduce the stress that can bring on symptoms.

- **Set a regular sleep pattern.** Go to bed and wake up at the same time each day. Getting enough sleep lets your body repair itself, physically and mentally. Also, avoid daytime napping and limit caffeine intake, which can disrupt sleep. Nicotine is a stimulant, so those fibromyalgia patients with sleep problems should stop smoking.

- **Exercise often.** This is THE core of fibromyalgia treatment. While difficult at first, regular exercise often reduces pain symptoms and fatigue. Patients should follow the saying, "Start low, go slow." Slowly add daily fitness into your routine. For instance, take the stairs instead of the elevator, or park further away from the store. After awhile, do more physical activity. Add in some walking, swimming, water aerobics and/or stretching exercises. It takes time to create a comfortable routine. Just get moving, stay active and don't give up!

- **Educate yourself.** Nationally recognized organizations like the Arthritis Foundation and the National Fibromyalgia Association are great resources for information. Share this information with family, friends and co-workers.

POINTS TO REMEMBER
- Look forward, not backward. Focus on what you need to do to get better, not what caused your illness.

- As your symptoms decrease with drug treatments, start increasing your activity. Begin to do things that you stopped doing because of your pain and other symptoms.

- With proper treatment and self-care, you can get better and live a normal life.

THE ROLE OF THE RHEUMATOLOGIST
Fibromyalgia is not a form of arthritis (joint disease). It does not cause inflammation or damage to joints, muscles or other tissues. However, because fibromyalgia can cause chronic pain and fatigue similar to arthritis, some people may think of it as a rheumatic condition. As a result, often a rheumatologist detects this disease (and rules out other rheumatic diseases). Your primary care physician can provide all the other care and treatment of fibromyalgia that you need.
Exercise Intensity

Low, moderate and high levels of exercise intensity, as measured by heart rate, are defined as follows:
• Low (or Light) is about 40-54% MHR (Maximum Heart Rate)
• Moderate is 55-69% MHR.
• High (or Vigorous) is equal to or greater than 70% MHR.

An individual's maximum heart rate can be estimated by using the formula: 220 – age in years = MHR. Pulse rate can then be monitored while an exercise is being done and the % MHR calculated to assess intensity.

So, for example, the estimated MHR for a 50-year-old individual would be 220 - 50, or 170. Let’s say that an individual's heart rate measured 100 beats per minute performing a certain activity. Since 100 is approximately 59% of the MHR (170), that would be considered a moderate level of exercise. The overall levels of intensity for a 50-year-old would be as follows:

• Low Intensity: heart rate is 68-to-92 beats per minute.
• Moderate Intensity: heart rate is 93-to-118 beats per minute.
• High Intensity: heart rate is more than 119 beats per minute.

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<thead>
<tr>
<th>Level of Intensity</th>
<th>RPE</th>
<th>Physical Cues</th>
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<tbody>
<tr>
<td>Light</td>
<td>Easy</td>
<td>Does not induce sweating unless it’s a hot, humid day. There is no noticeable change in breathing patterns.</td>
</tr>
<tr>
<td>Moderate</td>
<td>Somewhat hard</td>
<td>Will break a sweat after performing the activity for about 10 minutes. Breathing becomes deeper and more frequent. You can carry on a conversation but not sing.</td>
</tr>
<tr>
<td>High</td>
<td>Hard</td>
<td>Will break a sweat after 3-5 minutes. Breathing is deep and rapid. You can only talk in short phrases.</td>
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