Fibromyalgia

There is a possible association between hepatitis C (HCV) and Fibromyalgia (FM). Hepatitis C and FM share many symptoms such as fatigue, depression, cognitive issues, muscle and joint pain. The exact association has not been discovered, but many experts believe that HCV may act as a trigger to the onset of FM. Of interest, one study found that people with FM and HCV exhibit symptoms such as inflammation around joints, bursa (sac containing fluid for lubrication of joints) and/or tendons, and vasculitis (blood or lymph vessel inflammation), that are not seen in FM in people without HCV.

The prevalence of FM in people with hepatitis C has been found to be much higher than in the general population – 15% to 19% compared to approximately 2% of FM seen in the general U.S. population.

Of note, FM is believed to be triggered by viral infections. If we can test, treat and cure hepatitis C as early as possible there is a very real possibility that we can prevent many of these extrahepatic manifestations such as FM.
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SYMPTOMS
The symptoms of FM vary from person to person. The most common symptoms and conditions associated with FM include:

- Fatigue that can range from mild to severe
- Sleep disturbances such as trouble falling asleep, staying asleep and/or waking up feeling exhausted (non-refreshing or non-restorative sleep)
- Restless legs syndrome, a disorder of the nervous system that affects sensation and movement in the legs and causes a strong urge to move the legs. Restless legs syndrome can also interfere with sleep since the symptoms are usually worse at night
- Stiffness when waking or after remaining in one position for a prolonged period of time
- Irritable bowel syndrome, a condition characterized by stomach pain and bloating and frequently alternating constipation and diarrhea in the absence of any disease
- “FM Fog” symptoms, including difficulty concentrating, forgetfulness and mixing up words when speaking or reading (similar to HCV “Brain Fog”)
- Headaches that are usually caused by tight neck and shoulder muscles or from the pain associated with FM
- Hyper-sensitivity to light, noise, touch, and temperature
- Hypotension and reduced heart rate
- Numbness or tingling in the extremities (legs and arms)
- Anxiety, depression, and irritability due to pain, isolation and the unpredictability of the symptoms
- Painful menstrual periods in the absence of an infection
- Light-headedness and balance problems such as trouble with balance while standing and difficulty in visual tracking
- Pain described as burning or aching from knots in various muscle and tissue areas that can vary in intensity from mild to severe
- Hyper sensitivity to pain—in other words, a person with FM might feel more severe pain than normal

CAUSES OF FIBROMYALGIA
The exact cause of FM has not been established, but it is believed that FM may be triggered by a physically or emotionally stressful or traumatic event, repetitive injuries, illness (such as HCV), rheumatoid arthritis or by an autoimmune disease. FM may also be influenced by a person’s genes and may run in families. There is evidence that FM is caused from one or more of the triggers above and that it affects the way that pain is processed by the central nervous system. In the past, it was believed that FM was a disease of the muscles and soft tissues, but researchers have documented brain and central nervous system abnormalities. Another theory is that people with FM may have a gene that causes them to react strongly to certain stimuli that others might not perceive as painful.

DIAGNOSIS
Currently, there is not a simple blood test for diagnosing FM. Before a diagnosis of FM other conditions should be ruled out especially conditions that have similar symptoms. If a physician is not well-versed in FM the diagnosis may be overlooked.

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Physicians who are familiar with FM can make a diagnosis based on criteria established by the American College of Rheumatology (ACR) after ruling out any other conditions or diseases:

- Widespread pain (right and left side body pain above and below the waist) that lasts for more than 3 months
- A number of painful areas out of 19 parts of the body and based on the severity of symptoms such as fatigue, waking unrefreshed, memory and thought problems

MANAGEMENT

There is no cure for FM, but there are many strategies to manage the condition. This may include medications to control the pain and wellness strategies to help to make the person with FM more comfortable. A comprehensive approach with many different health providers (doctor, physical therapist and others) seems to work best – an approach that includes the person suffering from FM is a key element in successfully managing and treating FM.

MEDICATIONS

There are no drugs to cure FM, but there are many strategies that can help to manage some aspects of FM.

- Over-the-Counter (OTC) Medications
  OTC pain relievers such as acetaminophen (Tylenol), aspirin, and ibuprofen. But do not take too much because even these can cause liver, kidney, bleeding problems and other issues. Talk with your medical provider to make sure you are staying within the safe limits of these medications.

- Pain Medications
  Pain medications such as opioids can be used to treat severe pain but long-term use should be avoided because of the high risk of physical and psychological dependency. Talk with your medical provider about pain medications that have a lower risk of addiction.

Approved Medications: There are currently three medications approved by the Food and Drug Administration (FDA) to treat FM—Lyrica, Cymbalta, and Savella.

- Pregabalin (brand name Lyrica)
  In the studies submitted to the FDA, the improvement in pain by drug dose reported was 68.1% (300 mg dose), 77.8% (450 mg dose), 66.1% (600 mg dose), and 47.5% in the group that received the placebo medication. Some patients reported a decrease of pain within the first week of treatment. The most common side effects reported were blurred vision, constipation, increased weight, dizziness, feeling sleepy and headache. The side effects were generally reported as mild to moderate. The recommended dose of Lyrica is 300 to 450 mg/day. Pregabalin is also approved to treat partial seizures, pain following the rash of shingles and pain associated with diabetic nerve damage (diabetic neuropathy).

- Duloxetine HCL (Brand name Cymbalta)
  The FDA approved Cymbalta for the treatment of FM. In the clinical studies submitted to the FDA, 51% to 55% of patients receiving Cymbalta had a 30% improvement in pain and 65% to 66% reported feeling better. The most common side effects of Cymbalta include nausea, dry mouth, sleepiness, and constipation. Cymbalta is a reuptake inhibitor

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of serotonin and norepinephrine that is theorized to treat depression and pain by increasing the activity of serotonin and norepinephrine in the central nervous system. The recommended dose of Cymbalta is 60 mg daily. Cymbalta is also FDA approved in adults for the treatment of a major depressive disorder, the acute treatment of generalized anxiety disorder, and the management of diabetic peripheral neuropathic pain. Cymbalta may cause liver problems so liver functions should be monitored especially at the beginning of treatment.

- **Milnacipran HCl (brand name Savella)**
  In two large clinical trials, patients receiving Savella reported a 30% reduction in pain compared to what they experienced before they started taking Savella. The most common side effects reported were nausea, constipation, hot flush, hyperhidrosis (abnormal sweating), vomiting, palpitations, increased heart rate, dry mouth, and hypertension. Savella is thought to work by blocking certain brain neurotransmitters—norepinephrine and serotonin. Milnacipran HCl (Savella) is not generally recommended for people with liver disease.

There are other antidepressants and pain medications that are not approved by the FDA to manage and treat FM, but they may be prescribed “off-label” to treat FM. Consult with a medical provider for diagnosis, management, and treatment.

**EXERCISE**
Research has found that aerobic and flexibility exercises are some of the best tools for managing FM. Try gentle exercise like walking. Gentle stretching is also helpful. New research is examining strength training exercises. Physical therapy has also been found to improve the symptoms.

**SLEEP**
Getting the right type and enough sleep is very important. This can be difficult for people with FM since the symptoms of FM can interfere with amount and quality of sleep. Talk to your medical provider about medications to treat sleep disorders, pain management, and restless legs syndrome to help restore the quality of sleep.

**STRESS**
Stress can trigger or worsen the symptoms of FM. Stress management is another important tool that a person with FM can use to manage their symptoms. Try relaxation, prayer, meditation and other techniques to lower stress.

**WORK PLACE ADJUSTMENTS**
It may be helpful to find out if an employer allows for flexible work schedules, and improving the physical work environment with ergonomically correct equipment. This may include adjustments to chairs, desks and computer monitors. If you are unable to work you may be eligible for disability benefits from Social Security or from private disability insurance. People with FM have work place protections. Contact the Americans with Disability office at 1-800-949-4232 for more information.

**COMPLEMENTARY MEDICINE**
There are many practices that can help reduce some of the symptoms of FM and to help relieve the stress of living with a chronic condition including:

- **Acupuncture:** a practice to stimulate and restore energy flows through the body by inserting special small slender needles into certain points in the body

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- Acupressure: the same principle as acupuncture, but finger pressure is used instead of needles
- Prayer and healing practices
- Deep breathing techniques
- Biofeedback: a technique that a person learns to control bodily functions such as heart rate, blood pressure, and pain
- Relaxation techniques: meditation and healing practices
- Massage
- Yoga, tai chi, and Qigong

SUPPORT GROUPS

People with FM, like people with HCV, can greatly benefit from professional counseling and/or a support group to deal with the emotional and physical realities of living with FM.

To view our Extrahepatic Manifestations Glossary, click here

RECOMMENDED RESOURCES

National FM Association (NFA): http://www.fmaware.org
American College of Rheumatology: https://www.rheumatology.org/

Related publications:

Extrahepatic Manifestations Glossary
http://hcvadvocate.org/resources/glossaries/extrahep-glossary/

Type 2 Diabetes
http://hcvadvocate.org/hepatitis/factsheets_pdf/Type2Diabetes.pdf

Patient Assistance Programs
http://hepatitiscmedications.hcvadvocate.org/patient-assistance-programs/

For more information

- Americans with Disabilities Act
  www.ada.gov

- Mayo Clinic
  www.mayoclinic.com

- Centers for Disease Control and Prevention
  www.cdc.gov

- MedlinePlus
  www.nlm.nih.gov/medlineplus