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Fibromyalgia Affects an Estimated 5.8 million Americans...with No Existing Cure in Sight

An Original Contribution by Nilusha T. Fernando, D.O.

Fibromyalgia is a commonly encountered syndrome characterized by widespread pain, sleep disturbance, and fatigue often existing in conjunction with a host of other clinical symptoms. Although the existence of fibromyalgia syndrome (FMS) has been debated within the medical community, recent research and scientific evidence support the diagnosis of this complex disease process. The most common sites of pain in fibromyalgia patients include the neck, back, shoulders, pelvic girdle and hands, although any part of the body can be involved. In addition to musculoskeletal pain, fibromyalgia patients confront an array of symptoms that can fluctuate over time such as morning stiffness, headaches, anxiety, and cognitive disorders such as concentration, memory problems, attention deficit disorder, and anxiety. Because of its debilitating nature, fibromyalgia can have a serious impact on a patient's family, friends, and employers, as well as on society itself.



Conservative demographic estimates suggest that at any given time, 2% of the population meet criteria for the diagnosis of fibromyalgia. No race predilection for fibromyalgia has been identified; however, fibromyalgia is 4-7 times more common in females than males. Fibromyalgia can be diagnosed at any age, although it typically presents in persons aged 20-55 years.

Although the pathogenesis of fibromyalgia is not completely understood, objective evidence for the disease process has recently been elucidated. Biochemical changes in the CNS, reduced levels of serotonin, a 4-fold increase in nerve growth factor and elevated levels of substance P have all been found in association with fibromyalgia. FMS has been associated with abnormal quantities of several neurotransmitters, including: decreased serotonin (which is responsible for the sleep cycle, pain processing, body temperature, appetite, sex drive and mood), norepinephrine (which underlies the "fight or flight" response, alertness and memory), substance P and glutamate (which are involved in... ➔ *continued on page 3*)

Patient Success: Relief from Pain Restored Her Life

A Peripheral Nerve Stimulation gives back the lifestyle this active mom once enjoyed

It just seemed to appear out of nowhere. One morning Teresa awoke only to find herself doubled over in pain. The pain was sharp and deep, racing through her body. At first, she had hoped it would go away as quickly as it appeared. But with the pain not subsiding but actually worsening over time, Teresa decided to seek medical treatment if she wanted her active lifestyle back.

Teresa met with several physicians and surgeons in the area who attempted to diminish her chronic pain. Over the course of the following four years, she had four back surgeries and four disappointments. None of the medical procedures alleviated her pain as it continued only to worsen. Walking had become... ➔ *continued on page 4*

Current and cutting-edge information on treating spine and pain related disorders.



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- 101 Chesapeake Blvd., Suite D
Elkton, MD / 410-392-3385
- Delmarva Surgery Center
101 Chesapeake Blvd., Suite C
Elkton, MD / 443-245-3470
- www.midatlanticspine.com

NATIONAL HEALTH EVENTS**March 2009**

Mental Retardation Awareness Month
www.rcomo.org
www.preventblindness.org

National Brain Injury Awareness Month
www.biausa.org

National Colorectal Cancer Awareness Month
www.preventcancer.org/colorectal

National Endometriosis Awareness Month
www.endocenter.org

National Kidney Month
www.kidney.org/kidneydisease/kidneymonth

National Multiple Sclerosis Education and Awareness Month
www.msfocus.org

National Nutrition Month
www.eatright.org

World Kidney Day (Mar. 13)
www.kidney.org/news/wkd

National Inhalants and Poisons Awareness Week (Mar. 15-21)
www.inhalants.org

American Diabetes Alert Day (Mar. 24)
www.diabetes.org

April 2009

Alcohol Awareness Month
ncadi.samhsa.gov

Cancer Control Month
www.cancer.org

Foot Health Issues Related to Diabetes Awareness Month
www.apma.org

National Donate Life Month
www.organdonor.gov

National Youth Sports Safety Month
www.nyssf.org

Occupational Therapy Month
www.aota.org

World Health Day (Apr. 7)
www.who.int/world-health-day

Healthy Advice Q&A

Patient questions answered by Frank J. E. Falco, M.D.



Q: *What are the symptoms of rheumatoid arthritis? – Kathy P., Dover, DE*

A: Symptoms of rheumatoid arthritis often develop slowly over a period of weeks to months, affecting the hands, wrists, elbows, feet, ankles, knees, or neck. Stiffness, pain and swolleness in more than three sets of joints and on both sides of the body or are common early symptoms along with fatigue. Oftentimes bumps, known as nodules, develop in pressure points. Additional symptoms can occur including weight loss, low-grade, fatigue, and numbness or tingling in the hands. Since symptoms of rheumatoid arthritis can simulate other conditions' symptoms, check with your physician for a proper diagnosis.

Q: *What is fibromyalgia? – Tom K., Bel Air, MD*

A: Fibromyalgia is a very common chronic condition that causes pain, stiffness, and tenderness in muscles, tendons, and joints. Pain is usually widespread, involving both sides of the body and typically affecting the neck, buttocks, shoulders, arms, the upper back, and the chest. Other characteristics include restless sleep, awakening feeling tired, fatigue, anxiety, depression, and disturbances in bowel function. The disease predominantly affects women between the ages of 35 and 55. While fibromyalgia can develop independently or occur with another disease such as rheumatoid arthritis, the root of the cause remains an unknown.

Q: *My nephew was diagnosed with discitis. What is it? – Sue M., Wilmington, DE*

A: Discitis, also known as inflammation of the disc or disc space infection, is a rare condition that occurs in adults but more often in children. The cause of discitis is unknown. Studies show a bacterial or viral infection develops in the intervertebral disc space. Severe back pain is the main symptom, causing lack of mobility in adults and refusal to move in children. A MRI can confirm the diagnosis. Treatment is antibiotics and a back brace or a cast to limit mobility. If untreated, an abscess may develop which may require surgery to remove.

Q: *What is osteomyelitis and how is it diagnosed? – Joseph C., Mullica Hill, NJ*

A: Osteomyelitis is a rare infection that develops in the bones of the spine. The infection forms in the bone after bacteria or fungi travels through the bloodstream or spreads from nearby affected tissue. It also develops if trauma exposes the bone directly to germs. Symptoms include back pain, weight loss, and fever. Osteomyelitis is detected through blood tests and x-rays. Aggressive treatment is needed to prevent the infection from spreading and to save the bone. Antibiotics are prescribed and surgery may be needed. This condition may also be treated with a brace.

Health Tip: For menstrual cramps, place a warm towel or heating pad on your abdomen.

Fibromyalgia Affects an Estimated 5.8 million Americans...with No Cure


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...pain relaying and processing). Patients with FMS have decreased epinephrine and serotonin, but elevated substance P and glutamate. In addition to neurotransmitter abnormalities, patients with FMS also have abnormalities in hormones such as growth hormone, cortisone and other cytokines. All of these factors are related to a hypersensitivity to pain and suggest that fibromyalgia may be a condition of central sensitization or of abnormal central processing of nociceptive pain input. Ongoing research will continue to provide a clearer picture of the pathophysiology of this complex syndrome.

In 1990, the American College of Rheumatology (ACR) published a set of criteria for the diagnosis of fibromyalgia. The ACR diagnostic criteria include two basic clinical findings. The first is the presence of widespread pain that is present in all four quadrants of the body in addition to pain in the axial skeleton for at least three months. The second is the presence of pain in at least 11 out of 18 anatomically specific tender-points when palpated by an examiner using 4kg of pressure.

There are several medical conditions that have a demonstrated association with fibromyalgia. It has been proposed that an underlying pathophysiologic mechanism, termed central sensitization, provides the basis of the disease process in fibromyalgia as well as a variety of other associated conditions. It has been suggested that patients may have a hypersensitivity which alters their threshold to pain or other stimuli. This hypersensitivity may be mediated by neurobiologic changes as well as hypervigilance which may be associated with psychological factors. The conditions most commonly associated with fibromyalgia include irritable bowel syndrome, tension/migraine headaches, dysmenorrhea, temporomandibular joint syndrome, restless leg syndrome, multiple chemical sensitivity syndrome, and chronic fatigue syndrome.

A successful fibromyalgia rehabilitation program should include a multidisciplinary team of professionals and various modalities individualized for each patient. The cornerstone of fibromyalgia management is physical therapy. Low impact aerobic exercise and flexibility training are essential components of the rehabilitation program. Other treatment options include trigger point injections and certain classes of medications. Antidepressants, muscle relaxants and anticonvulsants are among the most successful pharmacotherapies in this population. These medications affect serotonin, substance P, norepinephrine, and other neurochemicals that have a wide range of activities in the central nervous system, including the modulation of pain sensation and tolerance. Pregabalin and duloxetine are the only medications approved by the FDA. Non-steroidal anti-inflammatory medications have only been found to be effective in combination with the above mentioned medications for analgesia. Narcotics should be avoided or used only sparingly. It is essential that sleep problems are addressed with behavioral and pharmacologic interventions. A comprehensive treatment approach should always include psychological support and intervention including cognitive behavioral therapy, relaxation training, group therapy, biofeedback, and stress management.

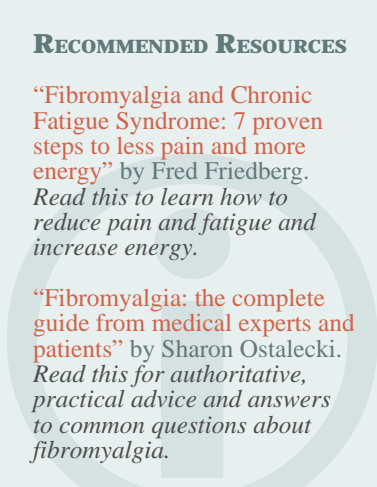
Fibromyalgia can present a significant challenge for both the treating physician and patient. The physician should inform the patient that although no cure exists for fibromyalgia, there are several things the patient can do. Education, lifestyle changes, and proper rehabilitation can help the individual to regain control of their symptoms and achieve significant overall improvement. 

Self-Help Pain Relief: Fibromyalgia

Over 45 million Americans suffer from chronic, recurring headaches

Fibromyalgia is pain that is felt throughout the entire body; widespread pain and exhaustion are felt from head to toe. The word *fibromyalgia* comes from the Latin term for fibrous tissue (*fibro*) and the Greek ones for muscle (*myo*) and pain (*algia*). It is felt in the muscles, ligaments, and tendons. Research has found that this pain is caused by malfunctions in the nervous system. The good news is that fibromyalgia is a syndrome, not a disease. Fibromyalgia is not fatal and does not cause any damage to your joints, muscles, or internal organs. Fibromyalgia is a chronic syndrome that can last for many years or even a lifetime. In many people, fibromyalgia does improve over time.

People with fibromyalgia may also experience sleep disturbances, morning stiffness, headaches, irritable bowel syndrome, painful menstrual periods, numbness or tingling of the extremities, restless legs syndrome, temperature sensitivity, cognitive and memory problems (also referred as “fibro fog”), and a variety of other symptoms.

Fibromyalgia is often hard to diagnose because symptoms may overlap with other conditions. A doctor trained in fibromyalgia will generally use two criteria established by the ACR: the history of widespread pain lasting over three months and a presence of tender points, places on the body where pain is felt in response to slight pressure. 

RECOMMENDED RESOURCES

“Fibromyalgia and Chronic Fatigue Syndrome: 7 proven steps to less pain and more energy” by Fred Friedberg. *Read this to learn how to reduce pain and fatigue and increase energy.*

“Fibromyalgia: the complete guide from medical experts and patients” by Sharon Ostalecki. *Read this for authoritative, practical advice and answers to common questions about fibromyalgia.*

“Foods That Help Win the Battle against Fibromyalgia: healthy and tasty recipes that boost the immune system while easing everyday pain” by D. Rawlings. *Read this for 100 nutrient rich recipes designed to boost energy and the immune system.*


Health Tip: Eat whole-grains, rice or pasta at least 4x/week to reduce your cancer risk by 40%.

MASPP News: Pain Symposium

The First Annual with Temple University Hospital

MASPP is organizing the First Annual Pain Medicine Symposium with Temple University Hospital. Hosted by the Physical Medicine and Rehabilitation Department at Temple and supported by an educational grant from St. Jude Medical, the event will take place on May 1st at the Philadelphia Marriott Downtown. "Low Back Pain" will be the focus.

Low back pain is the second most common reason that medical care is sought. Approximately 90% of the U.S. population will suffer a significant episode of low back pain in their lifetime, typically due to an injury of the soft tissue structures, spinal joints, or discs. Low back pain is also the leading cause for disability for those *under* 45 years of age and second for those *over* 45 years of age.

This one-day symposium is designed for the pain medicine physician who treats patients suffering from low back pain. It will provide the opportunity to learn more about the appropriate diagnostic and therapeutic interventions for low back pain. Distinguished pain physicians from Temple, MASSP and other recognized medical practices will present a wide range of topics on low back pain. MASSP physicians speaking at the event include Frank Falco, M.D., Obi Onyewu, M.D., Jie Zhu, M.D., Nilusha Fernando, D.O., Allan Vrable, D.O., and Jeffrey Berger, D.O. Registration is free. Parking and hotel accommodations are not included. 

MASPP Staff: Meet Dr. Obi Onyewu


Following His Childhood Dream



Some of us struggle to decide what we want to do with our life; to others, it comes naturally and almost instinctively as it did with Dr. Onyewu. He was just 12 years old when he decided to become a physician. As a child, he would tag along with his father to pick up his mom who worked as a nurse at a hospital. Meeting "the guys in the long white coats" was influential to him.

When he shared his dream with his parents, who are his greatest influences, their response was so positive that it stuck with him. As he became older, he became more aware of the importance of his decision. To wake up every day with the sole intention of attempting to make another person's life better is easily the best job in Dr. Onyewu's mind and heart.

Dr. Onyewu received a B.A. in Biology from Rutgers University and worked as a Research Assistant for the Anatomy Department for Temple University Medical School before medicine. After graduating from Temple, he completed a residency at National Rehabilitation Hospital.

Today, the compassionate and dedicated Dr. Onyewu is double board certified and a MASPP principal. Married with two children, he says fatherhood is his greatest achievement. In his free time, he enjoys family time, athletic endeavors, reading, foreign films, board games, and traveling. 

Have a question on pain? Visit our "Healthy Advice from the Pros" webpage.

<http://www.midatlanticspine.com/newsevents/advice.html>

PAIN LECTURE SERIES

Fridays • 7:30-8:30 a.m.
Union Hospital, Elkton, MD
Open to the public; Free

March 6
Ethical Standards in Pain Management, Research and Animal Experimentation

March 13
Management of Pain in the Elderly

March 20
Indications and Limitations of Diagnostic Testing

March 27
Rheumatological Aspects of Pain/Visceral and Urogenital Pain

April 3
Cancer Pain Mgmt – Medical

April 17
Multidisciplinary/Team Approaches to Pain

April 24
Psychotherapeutic Treatment for the Pain Patient

Patient Success: Relief from Pain Restored Her Life


Continued from page 1 -- Peripheral Nerve Stimulation gives mom her lifestyle back

a challenge for her, as well as her day-to-day activities. She was not able to do anything physical like she once could. Her pain was stopping her once active lifestyle.

Teresa finally met with MASPP and after a thorough exam and evaluation by one of the physicians, decided to have the Peripheral Nerve Stimulation as recommended. This minimally invasive procedure is ideal for patients suffering from chronic nerve-related pain, like Teresa. Electrodes are inserted by the peripheral nerves to deliver low-level electrical impulses to interfere with the pain traveling from the nerve to the brain.

It seemed that Teresa regained her mobility almost instantly following the procedure. And even more important, her pain sensation was diminished altogether.

Her husband and son immediately saw not only the change in her movement, but the change in her spirits with the complete alleviation of her longstanding pain.

"When you have that kind of pain, and you get 100 percent relief, it's like a miracle," a tearful Teresa remarks. "Now I can do a lot of things again. I got my life back." 



Health Tip: More than one glass of wine a day can cause liver and kidney disease and cancer.