Published by the Los Angeles County
Psychological Association

Psychological Association

Psychological Association

HEALTH PSYCHOLOGY:

New Horizons for Practice



HEALTH PSYCHOLOGY

Fibromyalgia: Definition and Solutions

Jeanne Melvin, M.S., OTR/L, FAOTA



Most psychologists who encounter fibromyalgia syndrome (FMS) are working with patients who have a mood disorder, and the FMS is comorbid. Often the patient's complaints of pain, fatigue, cognitive problems, and disability become barriers to successful psychotherapy. The multiple symptoms often are overwhelming to the patient, family members, and the therapist.

This article covers the key elements of FMS that need to be addressed in order to help patients.

First, FMS (formally fibrositis) is a real disorder. Medical journals have been describing the syndrome of FMS for a century. The syndrome has been recognized by the World Health Organization for two decades, and it has a specific ICD code (729.10). In rheumatology, it is considered a distinct syndrome that can be diagnosed to the exclusion of all other causes of musculoskeletal pain or rheumatic disease. It is considered to be one of several central pain syndromes in which the fundamental problem is caused by a disturbance in pain processing rather than tissue damage or inflammation at the site where the pain is experienced. Fibromyalgia is diagnosed by the presence of widespread pain/aching and tenderness to light touch in the trunk and all four extremities. The tenderness is quantified by excessive tenderness to light pressure on classic soft-tissue tender points. FMS affects women seven times as often as men.

Fibromyalgia can be idiopathic, often starting in childhood, waxing and waning over the years and reappearing in adulthood; or it can be *secondary* to trauma, surgery, stress, chronic illness, or insomnia. FMS is considered secondary when there are no symptoms of widespread pain or aching prior to the triggering incident. For patients with *post-traumatic fibromyalgia* following a physical injury (such as a ruptured disc, a fracture, or a repetitive strain injury), *fibromyalgia is a diffuse form of central sensitization that can be viewed as a pain-promoting neurochemical response that lies on top of the original injury*. This form of FMS can easily account for 50% or more of this type of patients' pain-score rating.

I describe fibromyalgia to patients as an imbalance of the central nervous system that results in hypersensitivity throughout the entire body (central sensitization). Most patients with FMS are aware that their mood is often irritable. This irritability in mood reflects hypersensitivity throughout the body: muscles, nerves, gut, bladder, skin, and sensory organs that perceive normal environmental stimuli such as temperature, noise, light, and smell as noxious. Most FMS patients affirm that "light touch" is uncomfortable or painful (widespread tenderness), and they believe that there is something wrong with

their body. But the problem is actually that the neural signal of "light touch" is being distorted and magnified and interpreted by the brain as *noxious*. When normal sensations are perceived as painful, it is referred to as "alloydynia." Clinically there appears to be generalized slowing or inefficiency in CNS function. One theory is that the *Descending Endogenous Pain Control System* is too slow to effectively inhibit ascending signals.

Cognition and Sleep

Most FMS patients report some cognitive impairment, and some report severe "fibro-fog." They have difficulty with focus, concentration, word-finding, thought-finding, short-term memory, reading retention, speed of processing, and often even of higher executive functioning such as organizing, planning, analyzing, problem-solving, and multi-tasking. They can remember but not fast enough to use a word or thought in a sentence. As a result they can become highly distractible. Sometimes they say, "Fibromyalgia made me ADD." In FMS patients without major depressive disorder (MDD), the cognitive impairment appears to be directly linked to their deficit in restorative sleep. (Of course, anxiety and depression can also affect cognitive functioning.) Once FMS patients achieve three months of natural, restorative sleep, they report "normal thinking," reflecting a return to their normal mental processing speed. Patients are very distressed about their cognitive functioning and having a therapeutic option gives them hope.

About 70% of the symptoms of FMS are also the symptoms of having a sleep disorder. In my 30 years of providing specialized sleep and wellness programs for people with FMS, I have treated over 3,000 FMS patients. Everyone in this specific population has had some form of sleep disorder. About 40-50% had "non-restorative" sleep, i.e., they fall asleep easily, sleep through the night, but they wake up tired or exhausted. Many of these people were unaware that they had a sleep problem; they believed that they were tired because they had FMS. In fact, they were tired because they had a non-restorative sleep disorder. Anything that makes a person tired or irritable causes central sensitization. So people who only have a sleep disorder often have musculoskeletal and gastrointestinal complaints, as well as anxiety and decreased motivation (depressive symptoms). People with solely a major depressive disorder (MDD) can also have a wide range of somatic complaints related to central sensitization but not of sufficient severity to meet the FMS criteria. I believe the key to getting well from FMS is correcting the sleep disorder behaviorally, without medications. But this is a task that takes active selfmanagement. Fibromyalgia is not necessarily caused by a sleep disorder; but once sleep is profoundly disturbed by pain, stress,

See "Fibromyalgia" continued on page 12

HEALTH PSYCHOLOGY

"Fibromyalgia," continued from page 11

or depression, the sleep problem appears to become the major perpetuating factor in the disorder.

The good news is that fibromyalgia syndrome does not have to be a life-long disorder. The imbalance in the CNS can be rebalanced though behavior. A person can have FMS for 20 years and recover (rebalance) and have every cell work normally, because FMS itself causes no degeneration or damage to the body. We also see many patients that are seeking treatment for a reoccurrence of symptoms after years or decades of being symptom-free. This is more a process of balance and imbalance versus remission and exacerbation.

Depression and Comorbid Fibromyalgia

Up until a couple of years ago, it was accepted that depression and anxiety were sources of the patient's insomnia and FMS. That may be true, but sleep disorders can develop a life of their own and uncouple from the depression and then become a perpetuating factor of the depression and the FMS.

Insomnia is a common symptom of major depressive disorder and associated with slower and lower rates of remission from depression and poorer clinical outcomes. Behavioral sleep therapists have known for a long time that cognitive behavioral



Presentations, Workshops & Trainings

Available through our Center for Education on Girls' Development

For more information, visit us on the web: www.InstituteForGirlsDevelopment.com

626.585.8075 ext.108

Melissa Johnson, Ph.D. PSY13102

therapy for insomnia (CBT-I) helped patients with depression. Manber et al. (2008) demonstrated this in a controlled study (N=30) comparing patients with MDD on escitalopram (Lexapro). One group received seven sessions of CBT-I, and the control group received seven sessions of desensitization training. The combination of antidepressant and CBT-I resulted in a higher rate of remission of both depression (61.5% vs. 33.3%) and insomnia (50% vs. 7%) and demonstrated that the combined treatment was more effective for improving insomnia than treating depression alone. (Full article available online.)

Medications and Fibromyalgia

People with FMS are generally very sensitive to medications and consequently have difficulty tolerating medications. At present, there are no drugs that can bring the FMS patient's brain back into balance. Even the drugs approved for fibromyalgia [pregabalin (Lyrica), duloxetine (Cymbalta), milnacipran (Savella)] are for symptomatic treatment, and they all have adverse effects that contribute to or perpetuate other imbalances. Any drug that causes fatigue, anxiety, insomnia, anhedonia, or impairs thinking can also impair the patient's ability to cope and prevent the body from achieving balance.

Multidisciplinary Treatment

The optimal treatment for FMS is multidisciplinary and includes CBT. Using behavioral treatment instead of medication to reduce this central sensitization process can result not only in the reduction of pain and the elimination of drug side-effects but also can promote an enduring improvement in overall health.

I teach patients that if the problem is "hypersensitivity," the solution is physiologic "hardiness." There are four behaviors that are effective for changing the brain chemistry and improving physiologic hardiness: restorative sleep, fitness exercise, healthy nutrition, and effective coping skills (stress management).

Multiple research studies have validated the efficacy of cognitive behavioral therapy, fitness therapy, and coping skills training in the treatment of fibromyalgia, and most leading rheumatologists that specialize in fibromyalgia recommend multidisciplinary treatment. The protocols for behavioral sleep therapy for FMS are being developed. Bringing the central nervous system back into balance is essential to getting positive results.

References

Manber, R., Edinger, J.D., Gress, J.L., San Pedro-Salcedo, M.G., Kuo, T.F., Kalista, T. Cognitive Behavioral Therapy for Insomnia Enhances Depression Outcome in Patients with Comorbid Major Depressive Disorder and Insomnia. *Sleep*, 2008 31:489-495.

Jeanne Melvin, M.S., OTR/L, FAOTA, is a Behavioral Pain and Sleep Therapist in private practice in Santa Monica. She provides the Behavioral Sleep Medicine Program for UCLA. Contact: JeanneMelvin@solutions-for-wellness.com.