

Fibromyalgia: The Enigma and the Stigma

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Issue: *Fibromyalgia is emerging as a diagnosable and potentially treatable syndrome.*

am more seriously ill than my doctors think." —Alfred Nobel

In the 19th century, the discoverer of dynamite and founder of Nobel prizes may have suffered from it. During that era, Freud may have treated it with psychoanalysis as neurasthenia and Charcot with hypnosis as hypochondria. In the 20th century, it was debated to be either a syndrome of abnormal muscles, sleep, pain, and mood or an entity invented by lawyers, charlatans, and disability seekers related to chronic fatigue syndrome, irritable bowel syndrome, "Yuppie flu," or multiple chemical sensitivity. Now, in the 21st century, as psychiatric disorders struggle to fly first-class with medical and surgical disorders, fibromyalgia is finally wait-listed to be upgraded from cargo to coach.¹

The Enigma: Diagnosable Medical Illness?

Fibromyalgia syndrome is recognized by rheumatologists as a chronic, widespread pain syndrome associated with fatigue, nonrestorative sleep, and tenderness at 11 or more of 18 designated "trigger points" where ligaments, tendons, and muscle attach to bone.²⁻⁴ It is the second most common diagnosis in rheumatology clinics and may affect from 2% to 4% of the population. There is no known cause, although fibromyalgia may occur following viral infections, exposure to toxins such as tainted tryptophan preparations, or physical or emotional trauma. There is no known pathology identifiable in the muscles or joints.^{5,6} Although symptoms are chronic and debilitating, they are not necessarily progressive.

Fibromyalgia presents as a chronic pain state and may represent abnormal sensory processing of NMDA (*N*-methyl-D-aspartate)-type glutamate receptor-mediated neurotransmission in unmyelinated C-fibers that carry pain impulses.⁷ Other hypotheses suggest abnormal substance P-mediated neurotransmission or hypothalamic-pituitary axis abnorin CRH-ACTH-cortisol malities regulation. None of these links is well established, however, and the pathophysiology of fibromyalgia remains obscure.

The Stigma: Mental Illness or All in Your Head?

About a third of those diagnosed with fibromyalgia have major depressive disorder (MDD). Most qualify for the diagnosis of a somatoform disorder. Many have associated anxiety disorders.¹⁻⁴ If these mental disorders are subtracted, is there anything "real" left—especially considering that "normal" people have aches and pains all the time, with almost all of us experiencing a somatic symptom (e.g., headache, neckache, backache, joint ache, muscle stiffness) every 4 to 6 days? Some skeptical experts apply Yogi Berra's logic to fibromyalgia, namely, "If I hadn't believed it, I wouldn't have seen it."8 Thus, fibromyalgia is considered by some to be the result of unconscious conflicts manifesting themselves as physical symptoms, with pain serving as a somatic metaphor for unhappiness and a life that is not working out.

This rather unsympathetic and oldfashioned point of view is slowly giving way to the idea that fibromyalgia may be as "real" as obsessive-compulsive disorder, social anxiety disorder, and other previously ill-defined entities that were not recognized as legitimate illnesses until antidepressant treatments began to define them as treatable. Furthermore, it is now well recognized that psychiatric disorders frequently do not occur in iso-

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lation, and the fact that fibromyalgia is comorbid with depression or anxiety actually makes this entity more similar to than different from MDD, generalized anxiety disorder, and most other contemporary psychiatric illnesses in the general population.⁹

Women's Health Issue?

Amazingly, studies²⁻⁴ suggest that between 75% and 90% of identified patients are women, especially white women. Is it possible that this entity has been

as neglected as other women's health issues?¹⁰ Will it remain on the fringe until political and consumer activism forces a serious look at this problem?

Fortunately, fibromyalgia is being taken seriously by an increasing cohort of investigators. Numerous welldesigned treatment studies with improved symptom assessment strategies are now under way,^{11,12} and new initiatives are searching for pharmacogenomic markers of fibromyalgia. This research bodes well for eventually defining this entity, and especially how to treat it.

Treatable?

Psychiatric illnesses have a long history of remaining illegitimate until a recognized treatment exists. Will fibromyalgia become respectable if an FDA-approved treatment is discovered? This possibility seems increasingly likely as numerous publications suggest that tricyclic antidepressants and selective serotonin reuptake inhibitors in particular may be effective for symptoms of fibromyalgia.¹¹⁻¹⁴ However, not all findings have been replicated, and methodological diffi-

Take-Home Points

- Fibromyalgia is a pain syndrome with tenderness but no structural pathology in muscles, ligaments, and joints. Various hypotheses suggest that this condition may be linked to abnormal neurotransmission in pain pathways or abnormalities in the hypothalamicpituitary axis, but the cause and pathophysiology of fibromyalgia remain obscure.
- Fibromyalgia is frequently associated with major depressive disorder and a deficit of restorative sleep. Although its place in the psychiatric lexicon remains controversial, the stigma of fibromyalgia as a "wastebasket syndrome" is now eroding.
- Recent studies are replicating the efficacy of different classes of antidepressants for this condition.

culties abound in many treatment studies of fibromyalgia. Nondrug treatments such as strength training and exercise may also prove effective.^{1,15,16} Obviously, a multidisciplinary approach to the treatment of fibromyalgia may yield the best results, analogous to the way psychotherapy can enhance the efficacy of antidepressants in many patients with depression or an anxiety disorder.

Conclusion

Although numerous issues need to be resolved about fibromyalgia, including defining pathophysiology, patient population, symptom assessments, and agents to use for treatment, this entity is on the verge of emerging as a legitimate syndrome in medicine and psychiatry.

REFERENCES

- Groopman J. Hurting all over. New Yorker Magazine 2000; November 13
- Goldenber DL. Fibromyalgia syndrome. JAMA 1987;257:2782–2787
- 3. Wolfe F, Smythe HA, Yunus MB, et al. The

American College of Rheumatology 1990 criteria for the classification of fibromyalgia: report of the Multicenter Criteria Committee. Arthritis Rheum 1990;33:160–172

- Wolfe F, Ross K, Anderson J, et al. The prevalence and characteristics of fibromyalgia in the general population. Arthritis Rheum 1995;38:19–28
- Kalyan-Raman UP, Kalyan-Raman K, Yunus MB, et al. Muscle pathology in primary fibromyalgia syndrome: a light microscopic histochemical and ultrastructural study. J Rheumatol 1984;11:808–813
- Simms RW, Roy SH, Hrovar M, et al. Lack of association between fibromyalgia syndrome and abnormalities in muscle energy metabolism. Curr Ther Endocrinol Metab 1994;5:120–124

7. Bennett RM. Emerging concepts in the neurobiology of chronic pain: evidence of abnormal sensory processing in fibromyalgia.

- Mayo Clin Proc 1999;74:385–398
- Berra, Yogi. The Yogi Book. New York, NY: Workman Press; 1998
- Regier DA, Narrow WE, Rae DS, et al., The de facto US Mental and Addictive Disorders System. Arch Gen Psychiatry 1993;50:85–94
- Stahl SM. Sex and psychopharmacology: is natural estrogen a psychotropic drug in women? [commentary] Arch Gen Psychiatry 2001;58:537–538
- Celiker R, Cagavi Z. Comparison of amitriptyline and sertraline in the treatment of fibromyalgia syndrome [abstract]. Presented at the 64th annual meeting of the American College of Rheumatology; November 2000
- Arnold LM, Hess SM, Keck PE. A randomized, placebo-controlled, double-blind, flexible-dose study of fluoxetine in the treatment of fibromyalgia [abstract]. Presented at the NCDEU meeting; May 2001; Phoenix, Ariz.
- Arnold LM, Keck PE, Welge JA. Antidepressant treatment of fibromyalgia. Psychosomatics 2000;41:104–113
- O'Malley PG, Balden E, Tomkins G, et al. Treatment of fibromyalgia with antidepressants, J Gen Intern Med 2000;15:659–666
- Richards SCM, Scott DL. Randomized controlled trial of exercise prescription for fibromyalgia [abstract]. Presented at the annual meeting of the 64th American College of Rheumatology; November 2000
- 16. King SJ, Wessel J, Bhambhani Y, et al. Followup of randomized controlled trial of exercise, education and a combination of exercise and education in women with fibromyalgia [abstract]. Presented at the annual meeting of the 64th American College of Rheumatology; November 2000