# 'Non-physiological' Disorders

JOSEPH H. FRIEDMAN, MD

A recent article in *The Atlantic* described doctors with long-haul Covid symptoms complaining about poor treatment by their colleagues when they reported pain, weakness, numbness and the wide spectrum of other symptoms that come and go and cannot be explained by our current concepts of pathophysiology. They complained of a lack of empathy and felt they were not taken "seriously." They were told to see a psychiatrist, that it was "all in their heads." One of their complaints, at least according to the article, was that they were treated like everyone else, that their status as medical professionals didn't make a difference. That may not have been such a bad thing for these physicians, and is an issue I won't take up. Being treated callously, however, is unacceptable, and we probably all do it to some degree, especially in patients with complaints physicians believe lack an organic etiology.

I am a neurologist in a very narrow niche, namely movement disorders, and primarily see people with Parkinson's disease (PD) and related disorders. I rarely see patients with long-haul Covid, chronic Lyme, chronic fatigue or similar processes. The long-haul Covid symptoms sound a lot like chronic Lyme, and apparently bring up the same responses in the health care field. A particularly moving description from a sufferer is Ross Douthat's recent writings in *The New York Times*, summarizing a book he wrote on his unfortunate odyssey with what he reports is chronic Lyme.

Like all clinicians, neurologists in all the subspecialty areas deal with non-physiologically explicable symptoms all the time. In some areas, like movement disorders, we often have examination tools that can discriminate between physiologic and non-physiologic symptoms and signs. We use distraction to make a tremor resolve.

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We can entrain an oscillation to alter a tremor's frequency. Non-organic weakness is usually very easy to detect. But we cannot usually discern conscious control of these disorders, i.e. malingering, from unconscious, psychogenic disorders, now labeled as "functional." We believe, paradoxically, that there is a physiological underpinning for these "non-physiological" disorders, because we believe that the patient is not doing it "on purpose," but we believe these mechanisms are different. We all believe in the placebo response, and while we call it "mind over matter," there have been reports implicating a physiological explanation. In one study, PD patients who improved with a placebo were shown to have produced more dopamine, as if they had been given L-Dopa, our main drug for treating PD rather than placebo. Responses to placebo pain treatment is reversed with naloxone, an opiate blocker. Functional MRI (fMRI) in a small group of patients with a psychogenic tremor disorder showed differences when the patients simulated their tremor from when it occurred as a psychogenic, unconscious tremor.

It is often difficult, sometimes impossible, to distinguish an "organic" from a non-physiological process. We probably don't do any better distinguishing an unconscious etiology from malingering. In the pre-MRI era, it was very common for patients, particularly young adult women, with a variety of seemingly non-physiological symptoms to be labeled as "crocks," when they had no demonstrable signs on exam, who later were confirmed to have multiple sclerosis. This is uncommon now only due to the widespread availability of MRI. But unsympathetic doctors remain a problem. Patients always deserve respect. That should go without saying, but there are a variety of ways to explain to a patient that their symptoms are not explainable by our current understanding of human physiology. A relative who had been an RN developed a somatoform disorder (similar to hypochondria), seeking Emergency Room care frequently,

sometimes several times per week, panicked about her presumed imminent demise, and was considered a nuisance in her ER. She knew that. She felt she was treated in a demeaning manner, ultimately committing suicide, apparently more for her perceived derision than for her fear of death.

The issue of functional disorders in neurology might contain lessons for how we understand and possibly treat long-haul Covid, chronic Lyme and similar disorders. In the course of my lengthy career, we have decided that writer's cramp (not writer's block) and other task-specific movement disorders are a form of focal dystonia, and are not treatable with psychotherapy. On the other hand, "fixed dystonia," in which there is a permanently sustained abnormal posture, even during sleep, without movements like tremors or spasms, is usually psychogenic. Propriospinal myoclonus is thought to usually, but not always, be a psychogenic disorder, but restless legs syndrome is now thought to be organic, that is, physiological. We see patients with gait disorders get dramatically better with ventricular shunts for hydrocephalus, but only for a few months before revealing their neurodegenerative disorder getting worse again. Do we achieve any physiological consistency by interpreting this as a placebo response, if the benefit lasts a few weeks or months, rather than providing a permanent cure, or are we merely fooling ourselves? Our lack of ability to objectively measure a symptom does not mean it's not there. Pain is best measured these days by picking a number between 0, a happy face, and 10, a sad face. In the future there will be a biomarker to measure pain, but there is none now.

In my field, we explain that a psychogenic movement disorder is a serious but not life-threatening problem, and that it is due to mechanisms we don't understand, but which we think are of emotional origin. Many of the patients we see with presumed psychogenic disorders have no identifiable psychiatric problem when evaluated by psychiatrists. This occurs so frequently that DSM V, the "bible" of psychiatric disorders, no longer requires psychiatric assessments for diagnosing conversion disorders. Telling the patient to see a psychiatrist is often only helpful in getting the patient out of the office and out of the practice. The treatment provider's role is to reduce the disability, and this requires empathy and some form of intervention, almost always with a physical or occupational therapist, and often, with the help of a psychologist or psychiatrist. Whether long-haul Covid symptoms will fall into this category or find a physiological explanation and treatment remains to be seen. ❖


## Author

Joseph H. Friedman, MD, is Editor-in-Chief *Emeritus* of the *Rhode Island Medical Journal,* Professor and the former Chief of the Division of Movement Disorders, Department of Neurology at the Alpert Medical School of Brown University, Chief of Butler Hospital's Movement Disorders Program and first recipient of the Stanley Aronson Chair in Neurodegenerative Disorders.

## Correspondence

joseph_friedman@brown.edu