Published in final edited form as:

J Neurol Neurosurg Psychiatry. 2018 June ; 89(6): 557. doi:10.1136/jnnp-2017-317684.

Patients with Parkinson disease are prone to functional neurological disorders

Mark Hallett

Managing patients with Parkinson disease is already complex and functional symptoms produce another layer of complexity.

Until recently the management of Parkinson disease focused almost entirely on the triad of bradykinesia, rigidity and tremor. It then became apparent that there are many non-motor features as well, and management of these is often as important as the motor symptoms. The work of Onofrj et al. first reported that functional symptoms are also frequent in Parkinson disease.¹ In a large study of 488 patients with Parkinson disease, 7.5% had some “somatoform disorders,” both motor and non-motor in type. They also noted that these symptoms could precede the motor and non-motor symptoms. The paper by Wissel et al. on p. xxx describes details of functional symptoms in 53 patients with Parkinson disease which should help in diagnosing them.

Functional symptoms are commonly seen by all physicians, including neurologists, but they were often overlooked with the reason that they did not reflect organic disease and the patients should be able to just get better by themselves. There has been some confounding of functional disorders with malingering. However, now functional disorders are coming out of the shadows, are being recognized, and there is proper recognition that they are real disorders deserving of attention and efforts at treatment.² Having a functional disorder, however, does not rule out an organic disorder, and vice versa. There is a substantial overlap with patients having both.

If a patient presents with functional symptoms and signs without any sign of Parkinson disease, then there is no reason to pursue that diagnosis. Most patients won't have Parkinson disease, but, of course, it is always wise to re-examine and reconsider the diagnosis each time a patient comes to the office since disorders may well evolve over time. If a patient presents with signs of Parkinson disease, then all the manifestations should be carefully considered as to their nature. Indeed, Wissel et al. found that 34% of patients with Parkinson disease had functional symptoms at the time of diagnosis.

Clues in this series that symptoms might be functional were a history of preexisting psychiatric disease including depression and anxiety, a family history of Parkinson disease, and the presence of dyskinesia. The latter might be violent shaking spells. Functional

Correspondence to: Mark Hallett, MD, DM(hon), Human Motor Control Section, NINDS, NIH, Bethesda, MD, USA; hallettm@ninds.nih.gov.

parkinsonism, dystonia, speech impairment and myoclonus were also seen. As with other functional disorders, patients were more likely female and medical care utilization was high.

A recent meta-analysis of somatization in Parkinson disease found nine relevant studies with a prevalence of somatization ranging from 7.0% to 66.7%.³ They noted that patients with somatization were more likely to suffer from cognitive decline. Along these lines, the prevalence of functional symptoms is higher in patients recognized as dementia with Lewy bodies compared to those with a Parkinson disease diagnosis.¹

It is not clear why patients with Parkinson disease are more prone to functional symptoms, and this might well be another clue to help us understand their pathophysiology. In the meantime, neurologists need to be alert to their presence.

References

1. Onofrij M, Thomas A, Tiraboschi P, et al. Updates on Somatoform Disorders (SFMD) in Parkinson's Disease and Dementia with Lewy Bodies and discussion of phenomenology. *J Neurol Sci.* 2011; 310(1–2):166–71. [PubMed: 21813140]
2. Hallett, M., Stone, J., Carson, A. *Functional Neurologic Disorders.* Amsterdam: Elsevier; 2016.
3. Carrozzino D, Bech P, Patierno C, et al. Somatization in Parkinson's Disease: A systematic review. *Prog Neuropsychopharmacol Biol Psychiatry.* 2017; 78:18–26. [PubMed: 28522290]