Inconsistency and incongruence: the two diagnostic pillars of functional movement disorder

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A 67-year-old woman, who had a 4-month history of a sudden onset of intermittent jerking movements with contortions of her head and right arm, attended our specialist unit. She had been seen earlier at another hospital where neuroimaging and electroencephalography were reported as normal. And after the patient was told the diagnosis was probably "psychogenic spells", she sought a further consultation.

She had no notable medical history; she was previously fit and well.

On examination, we found the patient to have paroxysmal retrocollis with rotational head movements accompanied by intermittent contractions of the platysma muscle. The movements were variable in amplitude and frequency, and briefly suppressed while she tried to perform complex finger tapping tasks; they occasionally synchronised to the frequency of finger tapping (video). During walking, the patient had a variable step length and width—astasia-abasia—and additional variations to her head movements (figure). She had an exaggerated response to the pull test. The patient's neurological examination was otherwise normal.

We did no laboratory investigations or imaging since the clinical presentation met the pillars of inconsistence and incongruence, rendering a definitive diagnosis of functional movement disorder (FMD). With explanation and reassurance that unrecognised maladaptive thoughts and beliefs can predispose to the development of FMD, the patient relayed to us that she had a diminished sense of self-worth; she was eager to address this issue with a cognitive behavioural therapist.

After 2 months of therapy, the patient's atypical movements ceased (video).

FMD is not a diagnosis of exclusion and can be established by clearly demonstrating the two clinical pillars of the disorder: inconsistency (or variability or distractibility) of the amplitude, distribution, and severity of the phenotype; and incongruence with the wide spectrum of manifestations of other neurological disorders.

Features suggestive of psychological difficulties are neither necessary nor sufficient to make the diagnosis. Historical details (eg, the way the condition started) are also unnecessary in concluding that the patient has FMD. Additionally, laboratory or neuroimaging investigations are not needed.

Finally, delivering and explaining the diagnosis to the patient is a critical step in the care pathway.

Patients receiving reassurance and a clear appreciation and understanding of FMD increases the possibility of successful resolution of symptoms and concordance with cognitive, physical, and occupational therapies.

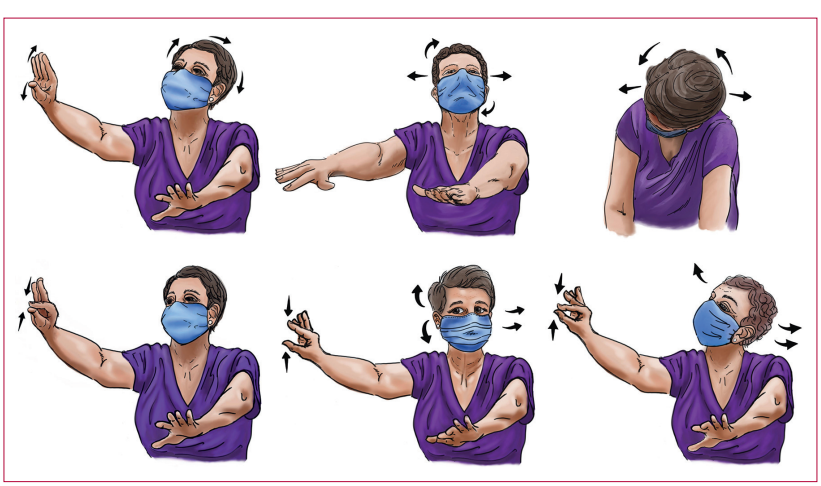

Figure: **Phenotype of a functional movement disorder**
Illustrations show cervical movements during attempts to perform complex finger tapping tasks.

Contributors

We were all involved in providing care for the patient. AJE collected the clinical data. CWH wrote the first draft of the manuscript. MSO provided overall supervision and critical review of the paper. Written consent for publication was obtained from the patient.

Declaration of interests

CWH has received grant support from the Parkinson's Foundation and has received honoraria for speaking engagements, grant reviews, and scientific reviews from The Parkinson's Foundation and UpToDate. AJE has received grant support from the National Institutes of Health (NIH) and the Michael J Fox Foundation; personal compensation as a consultant and scientific advisory board member for Neuroderm, Neurocrine, Amneal, Acadia, Acorda, Bexion, Kyowa Kirin, Sunovion, Supernus (formerly, USWorldMeds), Avion Pharmaceuticals, and Herantis Pharma; personal compensation as honoraria for speakership for Avion; and publishing royalties from Lippincott Williams & Wilkins, Cambridge University Press, and Springer. MSO serves as Medical Advisor for the Parkinson's Foundation, and has received research grants from the NIH, the Parkinson's Foundation, the Michael J. Fox Foundation, the Parkinson Alliance, Smallwood Foundation, the Bachmann-Strauss Foundation, the Tourette Syndrome Association, and the University of Florida Foundation. His research is supported by: NIH R01 NR014852, R01NS096008, UH3NS119844, and U01NS119562. He is Principal Investigator of the NIH R25NS108939 Training Grant.

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