

Functional Movement Disorders: Health Care Practitioner Information & Patient Resources

EDUCATION: Functional movement disorders (FMD) are a subtype of functional neurological symptoms and represent a disorder of neurological *function* rather than of *structure*. Symptoms include altered voluntary motor, cognitive or sensory function. This disorder is common, and particularly in the absence of treatment, are associated with high levels of disability and distress.

FMD is diagnosed on history and physical examination, on the basis of positive diagnostic signs such as variability and modification with attentional redirection. It is important to recognize that symptoms are real, disabling and not intentionally produced. FMD is often conceptualized as a complex neuropsychiatric illness: identifiable psychological stressors often (but not always) influence symptoms. Dr. Jon Stone and colleagues have published excellent freely available review articles on assessment and management of FMD if you are interested in learning more: http://jnnp.bmj.com/content/76/suppl_1/i2
http://jnnp.bmj.com/content/76/suppl_1/i13

CONCEPTUAL MODEL OF FMD: We can think of functional movement disorder symptoms as stemming from "abnormal motor programming." A computer analogy to contrast structure and function is useful: think of functional neurological symptoms as akin to a brain "software" problem rather than a 'hardware' problem. Just like computers, our brain program sometimes 'malfunctions.' Etiology of the 'malfunction' is often difficult to precisely determine, however, things like stress, anxiety, depression, trauma, pain, and poor sleep are common associated concerns. Addressing these issues, if present, will sometimes help relieve the neurological symptoms.

PSYCHOSOCIAL INTERVENTIONS FOR PATIENTS DIAGNOSED WITH FMD:

1. Online Resources:
 - a. Patient Guide to Functional Neurological Symptoms: www.neurosymptoms.org
 - b. Patient online support group: <https://fndhope.org/>
2. Cognitive Behavioural Strategies: FMD-specific cognitive behavior therapy helps to recognize and change unhelpful coping strategies and thought patterns. "Overcoming Functional Neurological Symptoms" by Christopher Williams is a good resource and can be used either independently by a patient as a self-help strategy, or in conjunction with a clinician trained in CBT. https://www.amazon.ca/Overcoming-Functional-Neurological-Symptoms-Approach/dp/1444138340/ref=sr_1_1?ie=UTF8&qid=1533519769&sr=8-1&keywords=overcoming+functional+neurological+symptoms

For patients diagnosed with **functional seizures**, “Taking Control of Your Seizures” by Reiter et al. is a good resource:

https://www.amazon.ca/Taking-Control-Your-Seizures-Workbook/dp/019933501X/ref=sr_1_1?ie=UTF8&qid=1533524448&sr=8-1&keywords=taking+control+of+your+seizures&dpID=41kLuVXEyOL&preST= SX258 BO1,204,203,200 QL70 &dpSrc=srch

3. **Techniques to Reduce Body Tension** - box breathing, mindfulness, progressive muscle relaxation - are relatively simple strategies that effectively reduce bodily tension and can help to reduce frequency of functional neurological symptoms. This self-help website is a great resource: <https://www.anxietybc.com/all-tools>

PHYSIOTHERAPY: FMD-specific physiotherapy, with a prioritization of motor retraining and reinforcement of normal movement, along with principles of rehabilitation have a solid evidence base in functional movement disorders. Recommendations are discussed in detail in recent physiotherapy consensus guidelines: <http://jnnp.bmj.com/content/86/10/1113>.

These guidelines can be printed and given to physiotherapists who are open to incorporating these techniques into their practice.

PSYCHIATRIC COMORBIDITIES: Major depressive disorder, generalized anxiety disorder, panic disorder, and PTSD commonly co-occur with functional neurological disorders. If present, they should be treated in accordance with standard treatment guidelines. There is insufficient evidence to make a recommendation for or against pharmacotherapy to treat FMD in the absence of other psychiatric comorbidities.