

THE FIRST STEP IN THE MANAGEMENT OF FUNCTIONAL NEUROLOGIC DISORDERS: DIAGNOSTIC DEBRIEFING

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SUMMARY

Treatment of FMD begins at the time of diagnostic debriefing, which ensures acceptance of the diagnosis. Exculpating the patient when delivering the diagnosis is the first therapeutic step since it enhances the yield of therapy and improve prognosis.¹

These four steps are critical in ensuring the patient is capable of accepting the diagnosis and embracing therapy:

STEP 1

- **State to the patient what he/she has**
- Rather than what he does not have (e.g., “medically unexplained disorder”)
- VERY HELPFUL: “Let me explain how I made this diagnosis”
(discuss tremor suppressibility, entrainment, etc.)
- Patients must not walk away from the clinic under the impression that “my doctor doesn’t really know” or “I was not told what I have”

STEP 2

- **State that the patient disability is real**
- Statements to make include: “This is not made up” and “the abnormal movements are truly involuntary and creating severe and progressive disability”

STEP 3

- **State that the disorder does not mean he/she is “crazy”**
- This is potentially the greatest obstacle to move on with therapy: “My doctor thinks I am crazy” or “it’s all in my head” (“I am making it up”)

STEP 4

- **Reveal the three “secrets to success”**
- 1. Embrace/Never doubt the diagnosis 100%
- 2. Understand that the potential for reversibility is high, but...
- 3. The reversibility depends on fully embracing the therapy and recognizing that anyone around is there to assist but not to cure. Cure comes exclusively from within

SUMMARY:

- Step 1: “You have a psychogenic movement disorder”
- Step 2: “You did not make this up; your disability is real”
- Step 3: “You are not crazy” (your emotional distress may not be overt)
- Step 4: “The success in therapy depends almost exclusively on you; which means:
- You cannot doubt the diagnosis: must embrace it 100%
- You and not your therapist has the key to the cure”

Other elements to consider adding at the time of diagnostic debriefing

- “Conflicts of interest” for treatment program (e.g., seeking disability, litigation proceedings, patient-centered family dynamics)
- Medication simplification program

Appendix 1

General therapeutic principles: A multidisciplinary team approach has been advocated, with neurologists, psychiatrists, and physiotherapists. However, the neurologist is the only one with the appropriate training to diagnose FMD with clinically definite certainty and steer the therapy decisively away from additional laboratory investigations or pharmacotherapeutic trials. Dallochio and colleagues suggested the acronym THERAPIST, modified here, as a reminders for the important elements in the management sequence for FMD: **T**erminology, **H**ear out the patient, **E**xplain the diagnosis, **R**eassure, **A**ddress issues, **P**rognosis, **I**ndividualize, **S**elf-help, and **T**reat concurrent illnesses, if any.² The treating neurologist must clearly indicate the diagnosis and correct patient misconceptions, with the goal of helping patients accept the diagnosis and facilitate their embracing subsequent therapeutic efforts. The nomenclature to use during the diagnostic debriefing remains controversial, but a desire to reduce dualistic thinking and minimize potentially demeaning or pejorative language has led to the proposal of using the term functional.³ It is important to emphasize that patients are not “crazy”, are not “making up” their symptoms and deficits (i.e., they are “real”), and that their disability is as severe as that of neurodegenerative disorders.⁴ Prior to introducing the treatment options, it is important to discuss any patient-related potential conflict of interest, which may prevent the success of therapy, such as disability proceedings, ongoing or anticipated litigation, and co-dependent relationship with spouse or caregiver.

Cognitive behavioral therapy (CBT) had accrued substantial evidence in depression and anxiety before its recent translation for patients with FMD.^{5,6} During CBT sessions, patients are guided toward the identification of their dysfunctional core beliefs (cognitive distortions) in order to disrupt the associated cognitive, emotional, and behavioral responses to past and ongoing stressors.⁷ Pharmacologic treatment of comorbid depression and anxiety, if present, may enhance the odds of success.^{8,9} A consulting psychiatrist can help initiate a course of treatment for any relevant psychopathology with the support of the treating movement disorder specialist.¹⁰ Studies in psychogenic non epileptic seizures have shown that selective serotonin reuptake inhibitors (SSRIs) can induce nearly 50% reduction in event occurrence,¹¹ a success rate that could plausibly be extrapolated to FMD.

Psychodynamic psychotherapy is another treatment modality potentially effective for FMD. It may also be combined with antidepressant and/or anxiolytics treatment and is aimed at evaluating historical life experiences, especially in early life, and personality traits, and compares these to current life experience and problematic emotions.¹²

Physical therapy has been evaluated as a mechanism to treat functional gait disorders. In one study, patients with functional gait participated in a 3-week inpatient rehabilitation program with improvement upon completion and at 1 year following the study.¹³ Dallochio and colleagues evaluated an exercise program in a cohort of 16 FMD patients documenting substantial improvements in disability ratings in 3 of them, and one third of the global cohort.²

A *1-week motor reprogramming physiotherapy* program in 60 patients was developed at the Mayo Clinic for patients with a variety of FMD, achieving nearly 60% improvement or remission.¹⁴ *Motor reprogramming* “breaks down aberrant movements and postures into individual motor components and gradually reconstructs more normal motor patterns,” reinforcing these patterns and ignoring inappropriate ones, thus forcing them into extinction.¹⁴ While this therapeutic option appears promising, it is unclear whether its application to FD can be expected to be as successful (the authors did not specify how many patients had FD in their report). A controlled clinical trial examining this physiotherapy approach is needed.

Appendix 2 (taken from “Functional Neurologic Disorders I”, by Dr. Anthony E. Lang) Approach to the Delivery of the Diagnosis to a Patient with a Functional / Psychogenic Movement Disorder

1. Emphasize that the symptoms are real rather than feigned – useful to emphasize that the diagnosis does NOT imply that the patient is “doing it on purpose” or that they are “crazy”
2. Use the “functional” signs in presenting and explaining the diagnosis to patient and family (certainty of diagnosis, difference from other forms of the same movement disorder, need for brain to focus on maintaining the movement disorder (e.g., distractibility) or non-physiological aspect of the sign (e.g., Hoover’s sign).
3. Use the analogy of software (functional) vs hardware (structural) problem

4. State the diagnosis confidently and also tell them what they don't have (brain tumor, Stroke, MS, Parkinson's, etc)
5. Emphasize that Functional Neurological Disorders are **common** and potentially fully reversible; refer the patient and family to the Website: www.Neurosymptoms.com
6. Avoid unnecessary tests and emphasize that no further investigations are indicated (if you are uncertain about the diagnosis do not present the diagnosis until you are certain; any degree of uncertainty → keep an open mind and follow patient with **repeated examinations** and further testing as necessary)
7. Communicate the diagnosis to other care providers emphasizing the positive / definitive nature of the diagnosis – avoid uncertainty and avoid negative diagnostic terminology (i.e., what the diagnosis isn't or is inconsistent with (medically unexplained symptoms)).

References

1. Salmon P, Peters S, Stanley I. Patients' perceptions of medical explanations for somatisation disorders: qualitative analysis. *BMJ* 1999;318:372-376.
2. Dallochio C, Arbasino C, Klersy C, Marchioni E. The effects of physical activity on psychogenic movement disorders. *Movement disorders : official journal of the Movement Disorder Society* 2010;25:421-425.
3. Edwards MJ, Stone J, Lang AE. From psychogenic movement disorder to functional movement disorder: it's time to change the name. *Movement disorders : official journal of the Movement Disorder Society* 2014;29:849-852.
4. Anderson KE, Gruber-Baldini AL, Vaughan CG, et al. Impact of psychogenic movement disorders versus Parkinson's on disability, quality of life, and psychopathology. *Movement disorders : official journal of the Movement Disorder Society* 2007;22:2204-2209.
5. Kroenke K. Efficacy of treatment for somatoform disorders: a review of randomized controlled trials. *Psychosom Med* 2007;69:881-888.
6. LaFrance WC, Jr., Friedman JH. Cognitive behavioral therapy for psychogenic movement disorder. *Mov Disord* 2009;24:1856-1857.
7. Morgante F, Edwards MJ, Espay AJ. Psychogenic movement disorders. *Continuum (Minneapolis)* 2013;19:1383-1396.
8. Feinstein A, Stergiopoulos V, Fine J, Lang AE. Psychiatric outcome in patients with a psychogenic movement disorder: a prospective study. *Neuropsychiatry Neuropsychol Behav Neurol* 2001;14:169-176.
9. Lang AE, Voon V. Psychogenic movement disorders: past developments, current status, and future directions. *Movement disorders : official journal of the Movement Disorder Society* 2011;26:1175-1186.
10. Williams DT, Ford B, Fahn S. Treatment issues in psychogenic-neuropsychiatric movement disorders. *Advances in neurology* 2005;96:350-363.
11. LaFrance WC, Keitner GI, Papandonatos GD, et al. Pilot pharmacologic randomized controlled trial for psychogenic nonepileptic seizures. *Neurology* 2010;75:1166-1173.
12. Hinson VK, Weinstein S, Bernard B, Leurgans SE, Goetz CG. Single-blind clinical trial of psychotherapy for treatment of psychogenic movement disorders. *Parkinsonism Relat Disord* 2006;12:177-180.
13. Jordbru AA, Smedstad LM, Klungsoyr O, Martinsen EW. Psychogenic gait disorder: a randomized controlled trial of physical rehabilitation with one-year follow-up. *J Rehabil Med* 2014;46:181-187.
14. Czarnecki K, Thompson JM, Seime R, Geda YE, Duffy JR, Ahlskog JE. Functional movement disorders: successful treatment with a physical therapy rehabilitation protocol. *Parkinsonism Relat Disord* 2012;18:247-251.