Functional neurological disorder

- Molly Howland, MD, Cleveland Clinic
- Ashley Smith, PA-C, Emory University

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Integrating Care and Evidence Across the Lifespan

CLP 2023

Disclosure: Molly Howland, MD

With respect to the following presentation, in the 24 months prior to this declaration there has been no financial relationship of any kind between the party listed above and any ACCME-defined ineligible company which could be considered a conflict of interest.

CLP 2023

Disclosure: Ashley K. Smith, PA-C

With respect to the following presentation, in the 24 months prior to this declaration there has been no financial relationship of any kind between the party listed above and any ACCME-defined ineligible company which could be considered a conflict of interest.

Case:

- Ms. G is a 40yo F with history of irritable bowel syndrome, postural orthostatic tachycardia syndrome, PTSD who presents after 6 minutes of thrashing movements of the upper extremities accompanied by screaming. Neurology has performed 3 days of lab and EEG monitoring. Prolactin level was negative and, though the patient did have a couple other similar episodes during the admission, EEG did not show epileptic activity. Psychiatry was consulted to assess for possible anxiety/PTSD contributing to functional seizures.
- As soon as you, a psychiatry advanced practice provider, enter the room and introduce yourself as a provider from psychiatry, the patient becomes visibly anxious and states “No, I don’t want to talk to you, these episodes are real, my trauma didn’t cause this like the neurologist said…”
- Food for thought:
  - Why might this patient have had this initial reaction?
  - How do you respond and provide further psychoeducation?

What is functional neurological disorder (FND)?

- One or more symptoms of altered voluntary motor or sensory function
  - Ex) seizures, hemiparesis, abnormal movements (e.g., tremor), sensory loss/symptoms
- Clinical evidence of incompatibility between symptom(s) and recognized neurological or medical conditions
  - “Software,” not “hardware” (structural) problem
- Subconsciously produced, not feigned (DSM-IV)

"Your trauma caused this"?

- Per DSM-IV, conversion disorder = neurological symptoms not due to a structural neurological cause, associated with preceding psychological conflicts or factors
  - Represents "conversion" of psychological distress or conflict into neurological symptoms

Update: Your trauma may not have caused this

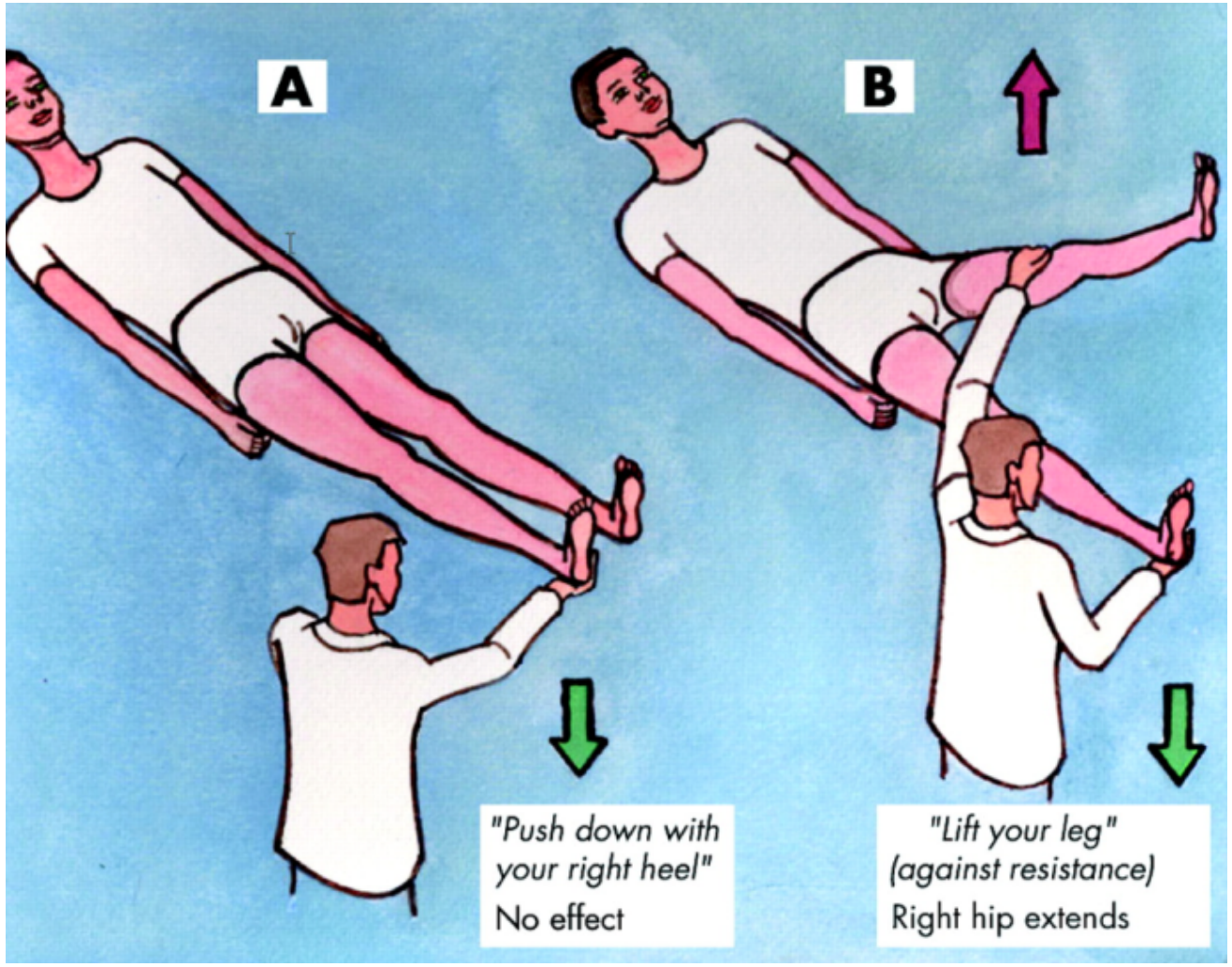
- DSM-5 has removed the psychological association requirement
- 50% psychological aspect (trauma, psychiatric disorder, stress, etc.)
  - For these patients, psychological aspect unlikely to be the sole or most proximal driver
- Many idiopathic
- Unclear mechanism, but for functional movement disorders, the **motor cortex does not activate** on fMRI
  - Dysfunctional anterior cingulate signaling→inhibition of cortical initiation of movement

What all contributes to FND?

Predisposing factors	Pre-existing psychiatric, medical, and neurologic conditions; triggered by physical illness or injury
Precipitating factors	Trauma, interpersonal conflict, recent or remote stressors; psychological stressors are not specific to FND
Perpetuating factors	Clinicians failing to give clear diagnosis, extensive workup and treatment, symptom misattribution

How does FND look?

- Variability
- Distractibility
  - Positive entrainment test for tremor
- Enhancement with attention
- Motor inconsistency
  - Hoover sign (see figure)
- Suggestibility



Functional seizure features

1. Twitching of arms and legs **> 2 minutes**
2. Biting tip of tongue
3. Gradual onset
4. Eyes remain closed
5. Side to side head movements
6. Significant extension of head, neck, and back
7. **Screaming** or crying
8. Hip thrusting
9. Severity **fluctuates**

Other supports for diagnosis

- Mainly a clinical diagnosis
- Negative lab testing and imaging is supportive but not definitive
- Functional seizures: EEG, ?prolactin
- Other functional diagnoses (e.g., chronic fatigue syndrome, irritable bowel syndrome, POTS, etc.)

Epidemiology

- Common: ⅓ of general neurology outpatients
- FND 2-3x more prevalent in women than men
  - Average age of onset 40
  - Gender difference equalizes in patients 50 years and older
- Associated with depression > anxiety

Prognosis

- Overall poor
- FND: 33-61% recover. “Conversion disorder”: 50-90% recover
- Functional seizures: 40% or less recover
- Better prognosis if younger age, shorter symptom duration

How to manage FND symptoms?

1st line	Diagnosis and psychoeducation! Medication for comorbid anxiety and depressive disorders
2nd line	Cognitive-behavioral therapy > psychodynamic therapy Occupational/physical/speech therapy
3rd line/treatment resistant	Chronic pain management, hypnosis, TMS, biofeedback (for tremor) Brief bedside psychotherapy?

Psychoeducation

Strategy	Examples
Validate symptoms and distress	"**Your nervous system is not functioning correctly**" "Your [symptom] is real and causing some real problems in your life"
Reassurance	"Your [symptom] is **not due to a progressive condition**" Avoid "this is not serious"

Psychoeducation part 2

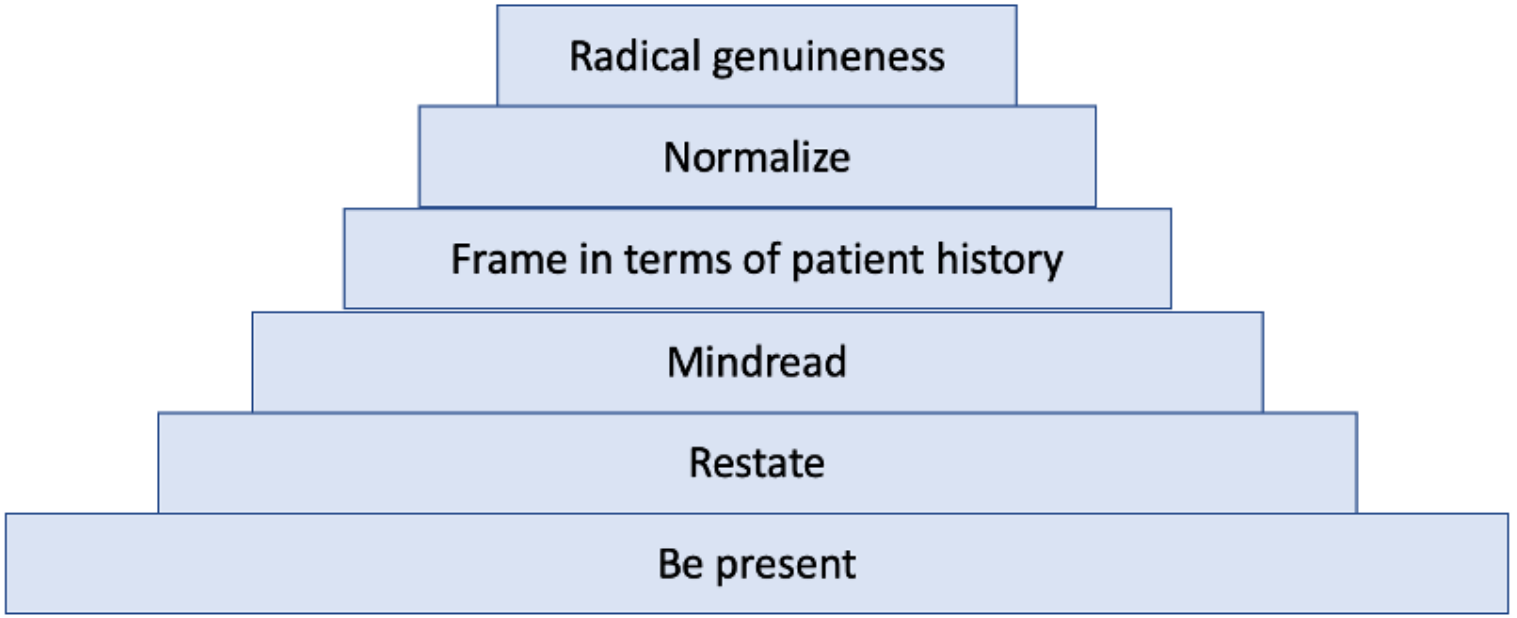
Strategy	Examples
Educate about etiology	"It's possible that stress or emotional factors are related, but **you are not causing or imagining this.**" "The cause is unclear, possibly related to the body's wear and tear. However, we do know that **stress**, including stress *about* symptoms, **can worsen symptoms**." → may refer to FNDhope.org → "We're going to do what we can to help, and there are some things you can do to help yourself"
Focus on coping with symptoms	→ "We want to focus on how to reduce stress and cope with symptoms" Set small and **achievable** exercise/socializing **goals**

Pharmacotherapy

- For comorbid psychiatric disorders only
  - Anxiety disorders, depression, PTSD: SSRIs/SNRIs/TCAs/atypical antidepressants
- Previously started anticonvulsants for seizure-like activity may help psych symptoms. If not helping and if no evidence of epileptic seizures, consider tapering anticonvulsants

Brief bedside psychotherapy

- Validation techniques
- Relaxation
- Grounding
- Distraction

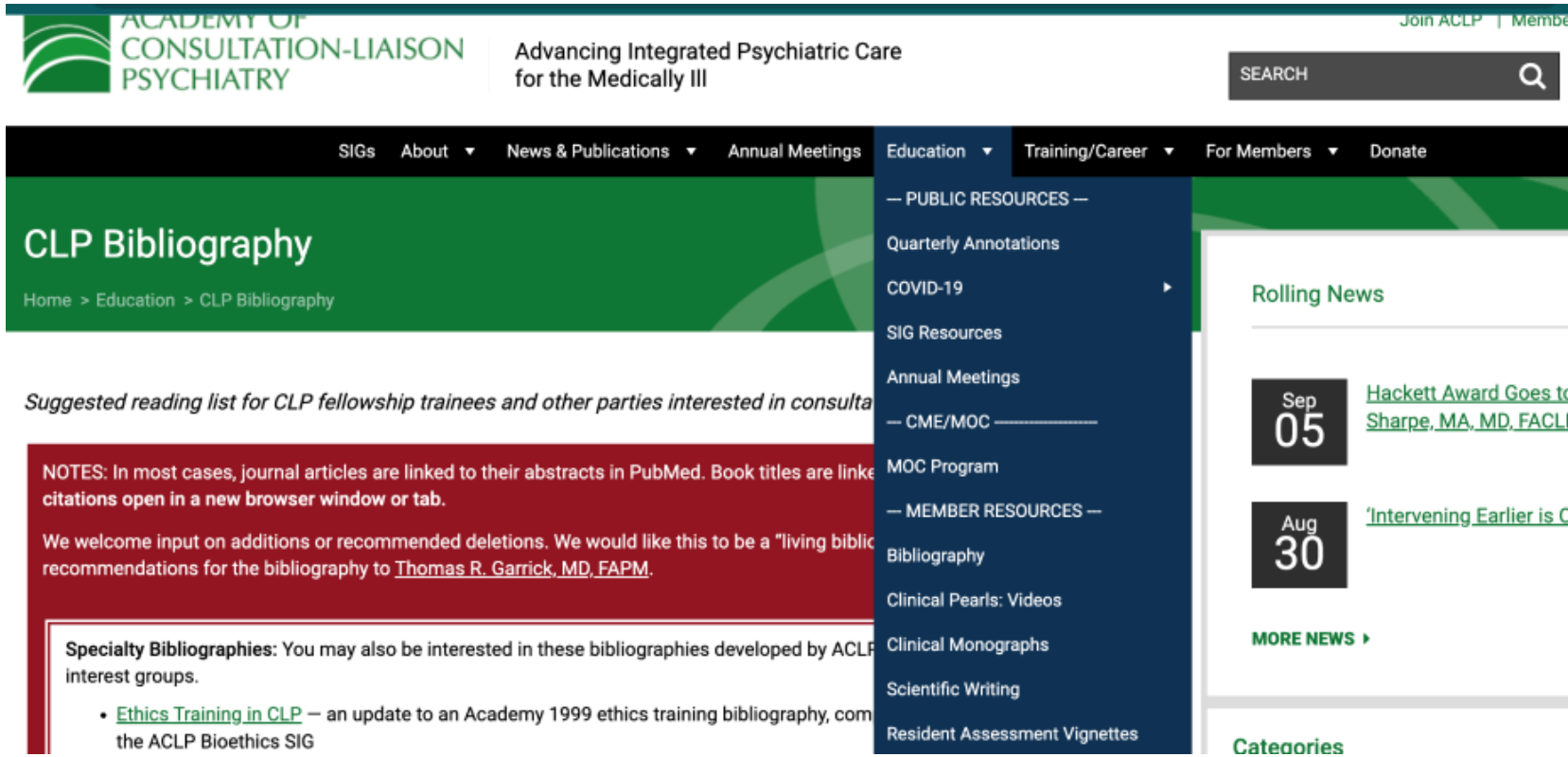


Take-away points

- FND is dysfunction of the nervous system that is commonly, but not always, associated with psychological factors or psychiatric disorders
- Diagnosing and psychoeducating in a destigmatizing way is the main therapeutic intervention. Psychiatry providers can assist with this
- An interdisciplinary approach is needed

ACLP resources

- Education tab → Bibliography → somatic symptom and related disorders
  - https://www.clpsychiatry.org/educationcareers/clp-bibliography/
- Education tab → Resident assessment vignette on somatic symptom and related disorders
- Annotations
- Posters 092 and 184
- Saturday debate: Perspectives on Somatic Symptom Disorder and FND,
  11:45am, JW Salon
  6-8



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- FNDhope.org
- neurosymptoms.org

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Questions:

1. How do you psychoeducate this patient?
2. Who are the team members to consider liaising with? How and what will you communicate with them?

Case part 2:

You run into the neurologist, a physician who has been practicing for 40 years. He says, “This patient needs to go to inpatient psych. There is nothing wrong with her. We’re not doing anything for her here.” You start to respond, but he talks over you and says, “Trust me, I’ve been doing this a while, aren’t you fresh out of APP training?”

3. How do you respond to the microaggression?