

Functional Neurologic Syndromes

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Disclosure

Within the past 24 months, I have received an honorarium from TEVA.

All relevant financial relationships have been mitigated by DMU CME.

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Criteria

- A somatic symptom disorder is diagnosed when the primary complaint is a physical complaint complicated by a neuropsychiatric behavioral problem

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FNSD

- This is present when the physical complaint consists of neurologic symptoms.
- In the past this has been referred to as a conversion disorder, or hysteria.
- The neurologic symptoms can be sensory, motor, or cognitive

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Diagnosis

- Diagnosis is made when the neurologic symptoms are not consistent with an alteration in the normal neurologic system or other medical diagnosis
- There is no evidence that patients are feigning their problems and there is growing evidence that the FNSD arises from changes in the function of the normal brain.

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RISK FACTORS

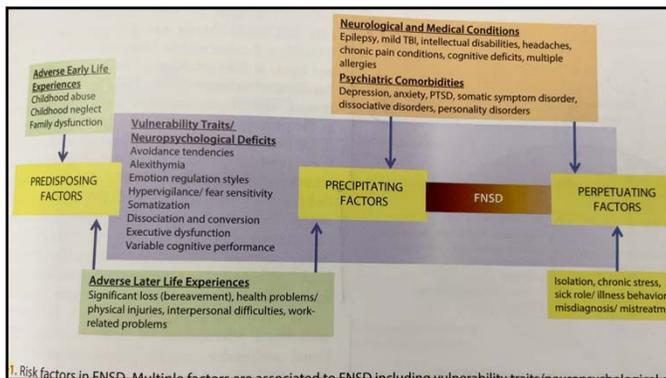
- Female gender
- Any age, but most commonly occurs between age 35 and 50
- Having a neurologic diagnosis is a significant risk factor
- No single category of neurologic disease is more likely to have an associated FNSD
- Traumatic brain injury
- Prior neurosurgery
- Intellectual or learning disabilities
- Substance abuse disorders
- Headache
- Chronic pain
- Medically unexplained symptoms

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Pathophysiology

- No single factor explains the development of FNSD
- Rather an interaction of multiple factors over time

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THEORIES

- Classical Freudian
- A disassociated hypothese by Piere Janet
- Modern cognitive model

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STRUCTURAL AND FUNCTIONAL IMAGING

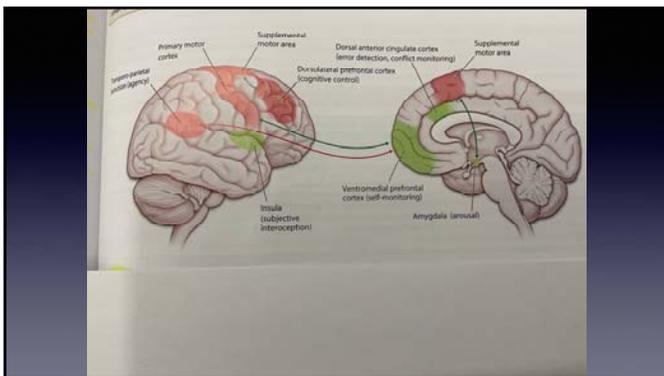
- These provide insight into the brain changes associated with FNSD
- Differences in the anatomy of both cortical and subcortical regions in patients with FNSD compared to healthy controls are demonstrated

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BRAIN CHANGES

- Increased thickness in premotor cortex and decreased volumes in subcortical nuclei in functional motor disorders
- Cortical atrophy in the right motor and premotor regions and bilateral cerebellar atrophy in pseudo seizures

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ASSESSMENT

- History and physical
- Hemotologic and metabolic blood profile
- Central nervous system visualization
- EEG
- Neuropsychological evaluation
- Personality profile
- Identification of risk factors as previously mentioned

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DIFFERENTIAL DIAGNOSIS

- This is very broad
- Use the DEMENTIAS PLUS MNEMONIC

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MNEMONIC

- D rugs
- E motional difficulty
- M etabolic abnormality
- E ndocrine problem
- N utritional and degenerative logical disease
- T umor or trauma
- I schemia, infection, inflammatory diseases
- A noxia, autoimmune, anemia, arrhythmia
- S ocial, sensory, spiritual isolation, seizure disorder
- PLUS; pain or low urine or stool output, low sleep

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COURSE AND NATURAL HISTORY

- Little information is available
- There are high rates of long standing disability
- More studies need to be done with better algorithm for treatment

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TREATMENT

- Clear communication
- Engagement in treatment
- Reassure patient that symptoms are genuine and not considered fake
- Name the diagnosis
- Highlight predisposing and perpetuating factors
- Describe the mechanism for the disease
- State there are treatments that work
- Explain that the brain gets overloaded and shuts down and manifests symptoms

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TREATMENT

- Multidisciplinary collaboration is essential
- Neurologists, psychologists, primary care physicians and family members optimally work together with the patient
- Cognitive behavioral therapy

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COGNITIVE BEHAVIORAL THERAPY

- Education about the disorder and stress response cycle
- Stress management
- Incorporation of new behaviors
- Identification and change of unhelpful thought patterns that reinforce symptoms
- CBT treatment workbooks

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TREATMENT

- Physical therapy
- Mindful movement
- Pharmacologic treatment: this is most appropriate when treating comorbid psychiatric problems
- Brain stimulation: ECT or TMS

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