Conversion Disorder

Robert Medley MSN, FNP-C, AGACNP-BC, SCRN
Nurse Practitioner
NeuroHospitalist Section - Mercy Hospital; Springfield, MO
Clinical Faculty - Missouri State University School of Nursing (DNP)

Objectives

• Describe the diagnostic criteria and be able to differentiate the following disorders
  • Conversion (DSM-IV) - Functional Neurologic Disorder (DSM-V)
  • Somatization (DSM-IV) - Somatic Symptom Disorder (DSM-V)
  • Factitious Disorder
  • Malingering - removed from the DSM-V index
• Describe Functional Neurologic Syndrome (Conversion Disorder) in the adult and pediatric population
• Describe potential differential diagnosis for Functional Neurologic Syndrome (Conversion Disorder) including other form of seizure disorder and how to differentiate from epilepsy
• Describe work-up for Functional Neurologic Syndrome (Conversion Disorder)
• Describe treatment possibilities for Functional Neurologic Syndrome (Conversion Disorder)
"Famous" Outbreaks

- Salem Witch Trials - 1692
- Writing Tremor Epidemic - Switzerland 1893
  - Germany 1905
- Twitching Epidemic - Bellevue, LA 1939
- England 1965
- North Carolina high school cheerleaders - 2002
- Mexico City 2007
- LeRoy, NY

Conversion Disorder - Diagnostic Criteria

- One or more symptoms of altered voluntary motor or sensory function
- Clinical findings provide evidence of incompatibility between the symptoms and recognized neurological or medical conditions
- The symptom or deficit is NOT better explained by another medical or mental disorder
- The symptom or deficit causes clinically significant distress or impairment in social, occupational, or other important areas of functioning or warrants medical evaluation
### Somatization Disorder - Diagnostic Criteria

- One or more somatic symptoms that are distressing or result in significant disruption of daily life (GI disturbance, Chest Pain)
- Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:
  - Disproportionate and persistent thoughts about the seriousness of one’s symptoms
  - Persistently high level of anxiety about health or symptoms
  - Excessive time and energy devoted to these symptoms or health concerns
- Although any one somatic symptom may not be continuously present, the state of being symptomatic is persistent (more than 6 months)

### Factitious Disorder - Diagnostic Criteria

- Falsification of physical or psychological signs or symptoms or induction of injury or disease, associated with identified deception
- The individual presents himself or herself to others as ill, impaired, or injured
- The deceptive behavior is evident even in the absence of obvious external rewards
- The behavior is not better explained by another mental disorder, such as delusional disorder or another psychotic disorder
- **Malingering**
  - *Removed from DMS -5 index; falsification of symptoms for secondary gain*
Conversion Disorder

- Also known as:
  - Functional (referring to abnormal central nervous system functioning)
  - Psychogenic (referring to an ASSUMED etiology)

- Neurologic symptoms
  - Movement disorder
  - Seizure-like activity (PNES)
    - Abnormal limb and/or generalized shaking with/without loss of consciousness
    - Psychogenic
    - Non-epileptic
    - Pseudoseizures
  - Sensory disorder

- Coma like
  - Periods of unresponsiveness
Conversion Disorder

- Prevalence
  - Likely under reported
  - Approximately 5% of referral to neurologist
  - Estimates 2-5/100,000 per year

- Development and course
  - Onset reported throughout life course
  - Non-epileptic attacks peak in the 3rd decade of life
  - Motor symptoms peak in the 4th decade

- Risk factors and prognostic factors
  - Temperamental - maladaptive personality traits common
  - Environmental - history of child abuse and neglect; stressful life events are COMMON BUT NOT ALWAYS PRESENT
  - Genetic and physiological - presence of neurologic disease that causes similar symptoms (PNES WITH epilepsy)
  - Course modifiers - short duration of symptoms and acceptance of the diagnosis are positive prognostic factors; maladaptive personality traits, the presence of comorbid physical disease, and the receipt of disability benefits may be negative prognostic factors
  - 2-3 times more common in females - some sources report 6:1 female to male ratio

Symptoms

- Motor
  - Weakness
  - Paralysis
  - Abnormal movement - tremor, dystonia
  - Gait disorder
  - Abnormal limb posturing
  - Speech disorder
    - Dysphonia
    - Aphonia
    - Dysarthria
    - Globus (lump in the throat)

- Sensory
  - Altered, reduced or absent skin sensation
  - Vision
  - Hearing

- Cognitive
  - Poor concentration
  - Poor memory
  - Impaired fluency
  - Jumbling words
  - Word finding difficulty
  - Variable speed in responses
Differential Diagnosis

• Neurological disease - may co-exist
• Somatic Symptom Disorder - physical symptoms (GI, pain, chest pain) but not neurologic (motor or sensory)
• Factitious Disorder or Malingering
• Dissociative disorders
• Body Dysmorphic Disorder - excessive concern about a perceived defect in the physical features BUT NO complaint of motor or sensory symptoms of the affected body part
• Depressive disorders - limb heaviness reported but no focal weakness as seen in Conversion Disorder; presence of other core depressive features/symptoms
• Panic Disorder

Subjective findings

• History
  • Subjective symptomology
    • Onset and progression of symptoms
    • Circumstances at the onset of symptoms
    • Dissociation
    • Disability
      • “What is a typical day like”
    • Illness beliefs
    • Psychosocial functioning
    • Family history
    • Prior hospitalizations
    • Prior Clinicians
    • Recent psychological stressors
    • Comorbid psychiatric symptoms and disorders
    • Physical and/or sexual abuse
Core Issue

- There is often an inciting event (ictus) that starts the cycle; and then triggers for symptoms throughout life
  - Inciting event - physical or sexual abuse during childhood or adolescence
  - Symptom trigger - new relationship becoming intimate
- Inciting event - personal decision to engage in high risk behavior leaving feeling of guilt
- Symptom trigger - visitation with friends and family that the individual PERCEIVES would not approve of the behavior

Objective findings

- Physical Examination
  - During the examination monitor for inconsistency in findings
  - Incongruity between symptoms and recognized disease (symptoms do NOT conform to the known anatomical pathways and physiologic mechanisms
    - No ankle plantar flexion while lying down but ability to stand/walk on toes
    - Inability to move arm during examination but able to use arm to take something out of a bag or put shoes back on
    - Hoover’s sign - hip extension weakness when test alone but return to normal with contra-lateral side is tested
    - Hip abductor sign - strength in affected leg returns to normal with contra-lateral hip abduction
    - Co-contraction sign - simultaneous contraction of the agonist and antagonist muscles
    - Give-way or collapsing weakness - abrupt weakness against resistance
    - Delayed or slow or jerky descent when the clinician positions the outstretched arm in front of the patient and then releases it
    - Global or inverted pyramidal weakness in the legs
    - Facial spasms
    - Drift without a pronator sign - bilateral drift
    - Sternocleidomastoid test - difficulty rotating head
Objective findings

- Physical examination
  - Movement disorder
    - Tremor
    - Seizure like activity
  - Speech symptoms
    - Most common - functional dysphonia; whispering or hoarseness
    - Sing-song voice
    - Diagnosis can be made with normal vocal cord movement on laryngoscopy
    - Stuttering speech
    - Telegrammatic speech (omitting conjunctions and definite articles)
    - Foreign accent syndrome
    - Mutism

Objective findings

- Sensory Symptoms
  - Anesthesia
  - Any alteration of sensation
    - Incongruent with known nerve pathways
  - Visual
    - Intermittent blurred vision or diplopia; nystagmus and even blindness
  - Blindness (often associated with factitious disorder rather than conversion)
    - Finger tip test - difficulty bringing finger tips together (true blindness use of proprioception to touch finger tips together)
    - Signature test - conversion disorder have difficulty writing their name
    - Menace - visual threat test
    - Tearing reflex - tears to bright light
    - Optokinetic test - Nystagmus with rotating black/white lines - intact brain
Diagnostics

- Diagnostics are performed to EXCLUDE Neurological and Medical conditions that may produce the symptoms and identify comorbid conditions
  - Basic labs; CBC with smear, CMP
  - 24 Hour Urine
  - Serum ceruloplasmin
  - TSH, thyroid peroxidase antibodies, thyroglobulin antibody
  - ESR, ANA, extractable nuclear antibody, cardiolipin, lupus anticoagulant
  - HIV, Lyme, ASO (anti-streptolysin antibody O)
  - Hcg
  - Heavy metal
  - Trace Elements
  - Drug screen

- Imaging corresponding to functional area in question
  - MRI brain if seizures like activity
  - MRI spine if extremity sensation change and weakness

- EEG if seizure like activity

"My objectives became to cover it up, play it off, and divert attention as much as possible-- definitely NOT to talk about it."
Treatment

• **Build trust**
  • This is not an easily diagnosed disorder
  • Diagnosis delivery takes practice and tact
• Validate the symptoms
• Identify the inciting event
• Identify the trigger for symptoms
• Do NOT use words like
  • Crazy
  • Fake
• Psychology or Neuropsychology referral with definitive diagnosis
• Medications
  • Antidepressants
  • Antianxiety
  • Mood stabilizers
• Treat the trigger is possible

Search and Rescue

• Search for the inciting event
  • Reassurance
  • Support
  • Listen
  • Don’t judge
  • Understand that this can not be changed but coping mechanisms can help
• Rescue from the symptom trigger(s)
  • Reassurance
  • Support
  • Listen
  • Don’t judge
  • Learning to avoid those triggers whenever possible; coping mechanisms
  • This is where treatment success occurs and YES, the patient can live symptom free
References

- All images within the public domain of the worldwide web
- Diagnostic and Statistical Manual of Mental Disorders; Fifth edition
- Up-to-Date; Conversion Disorder
Until Next Time.....

Questions? Concerns? Comments? Recommendations?