Conversion Disorder (Functional Neurologic Symptom Disorder)

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Risk

- Reported prevalence varies widely (11–500"100,000). It may account for unexplained symptoms in as much as 1–14% of general medical/surgical pts and possibly as much as 20% of new outpatient neurology referrals.
- Possibly higher in rural populations, developing areas, lower socioeconomic groups, those less medically sophisticated, and following physical and sexual abuse and trauma.

Perioperative Risks

- Hx of conversion disorder may not increase periop morbidity or mortality per se, although the risk may increase for "failure to diagnose" if new symptom complexes are too quickly attributed to conversion disorder.

Worry About

- Presence of undiagnosed cognitive, neurologic, or general medical illnesses and adverse effects of a drug or treatment
- Periop appearance of conversion symptoms mimicking medical disturbances, drug effects, or anesthetic or surgically related complications
- Malingering disorder, factitious disorder, dissociative disorder, addiction, pseudoaddiction, and withdrawal

Overview

- DSM-V: Conversion disorder (functional neurologic symptom disorder)—in conversion disorder, a subclassification of Somatic Symptom and Related Disorders is a diagnosis of exclusion made when a pt demonstrates or reports motor or sensory symptoms unexplained by a medical condition.
- ICD-10 classifies conversion disorder among dissociative disorders and places more emphasis on disproving a factitious disorder.
- Following anesthesia, occurrence of seizures, generalized or focal weakness or sensory loss, and trouble with speaking or swallowing require careful workup even though may also be the presentation of conversion disorder. The amount of medical knowledge held by the pt may predict whether the presenting symptoms closely mimic known medical conditions and may affect the degree to which the pt accurately reproduces the symptoms on serial evaluation.
- Different from malingering and factitious disorders, the pt is not consciously generating false symptoms. In isolation, neither report of pain nor sexual dysfunction is sufficient to meet the criteria.
- Most common in the second through fourth decades, with initial symptom onset lasting up to 2 weeks, according to the DSM-V, loss of body movement, sight, or speech have better long-term outcome than symptoms of seizure or tremor.

Etiology

- Although the exact etiology is unknown, symptoms may occur as an unconscious solution to trauma or unresolved conflict.
- More common in pts with prior medical and psychiatric diagnoses.
- Possible genetic predisposition suggested in twin and familial studies.

Usual Treatment

- Confirm Dx with psychiatric consultant while excluding possible medical conditions.
- Reassure pt and family members that symptoms do not appear to represent a life-threatening condition and that investigation and treatment will continue.
- Optimize treatment of coexisting psychiatric (especially anxiety and depression) and medical conditions.
- Conversion disorder may respond to behavioral therapy, psychodynamic therapy, or psychoanalysis and may respond to psychopharmacologic treatment of comorbid anxiety and depression.
- There is no specific psychopharmacologic intervention for conversion disorder. Unless used to treat a comorbid condition, ECT is not indicated.

Assessment Points

System	Effect	Assessment by Hx	PE	Test
CNS	Four subtypes:			
	1. Motor: tremor, paralysis, localized weakness, aphonia, and difficulty with swallowing, balance, or coordination 2. Sensory: loss of touch or pain sensation, double vision, blindness, deafness, or hallucinations 3. Seizures or convulsions 4. Mixed presentation	Differential dx incl almost any medical condition (e.g., myasthenia gravis, MS, porphyria, diabetic neuropathy, hyperparathyroidism, tumors, idiopathic or substance-abuse dystonias)	Findings may not conform to known anatomic pathways or physiologic mechanisms; symptoms may be inconsistent (e.g., unacknowledged strength in antagonistic muscles; normal muscle tone, intact reflexes; equal difficulty swallowing solids and liquids; paralyzed extremity moves on its own with dressing [arm held over pt's head by examiner and dropped will not fall on the head]); stocking-glove anesthesia without proximal to distal gradient; equal loss of light touch, sharp-dull, and temperature discrimination at sharply demarcated anatomic landmarks rather than peripheral nerve or dermatome distribution	Absence of expected findings (including EEG, EMG, lumbar puncture, CT, MRI, SPECT scan, nerve conduction velocity, drug screen) suggests diagnosis
GENDER		Gender tendencies: Men—Antisocial personality and work-related or military injury Women—More common, especially on the left side of the body Children <10 years—Seizures and gait disturbances		

Key Reference: American Psychiatric Association: Somatic symptom and related disorders. In *Diagnostic and statistical manual of mental disorders,* ed 5, Arlington, VA, 2013, APA.

Perioperative Implications

Perioperative Preparation

- Carefully record pt's Hx and PE, documenting normal function, as well as any preexisting neurologic deficits.
- Confer with treating providers, (e.g., internist, neurologist, psychiatrist/psychotherapist).
- Consider possibility that the reason for surgeries in pt with multiple procedures may involve conversion symptoms.

Monitoring

- Routine

Airway

- None

Premedication/Induction/Maintenance

- Attempt to treat reported intense pain in holding area before titrating anxiolytic.
- Regional anesthesia not contraindicated.

Extubation

- None

Adjuvants

- Preop, do not omit psychiatric medication.

Postoperative Period

- Consider conversion disorder when neither neurologic evaluation nor workup of other possible medical conditions explains symptoms, especially in setting of trauma or unresolved stressors.
- Caution because apparent conversion symptoms may represent previously undiagnosed medical disease.

Anticipated Problems/Concerns

- Because conversion disorder is more common in pts with other psychiatric and medical diseases, clear documentation of these during the preop evaluation may prove of immeasurable value to the treating anesthesiologist in the postop period. If the pt develops new, otherwise unexplained symptom complexes, consider including conversion disorder in the differential diagnosis.