Conversion disorder, or functional neuromotor syndrome, has long been viewed as a diagnosis of exclusion, but studies show it is among the most common of neuropsychiatric disorders. It can be defined as a disorder of voluntary motor or sensory function with incompatibility between the symptom and known neurological or medical conditions. This disorder has many biopsychosocial and psychodynamic underpinnings and has long been the subject of debate between neurologists and psychiatrists alike. Regardless of the theoretical viewpoint, the concern is similar: functional symptoms are not due to a structural or a neurologic etiology, and the patient is being truthful. Our case is a manifestation and communication of a threatening feeling or idea. We present a case of a 35 year old female admitted to the hospital for progressive lower extremity weakness and an inability to walk. Physical exam showed inconsistent neurological findings, imaging was negative, and blood work was unremarkable. She was diagnosed with unspecified depression and transferred to the inpatient psychiatric unit. Throughout her treatment course, the patient displayed peculiar behaviors and primitive ego defenses. It became clear that her symptoms served as an expression of an internal conflict and external demands. Here we review her clinical course and discuss the multidisciplinary approach used in her care. We also discuss the importance of a careful medical workup and physical exam, thorough psychiatric assessment, and calculated delivery of diagnosis in the treatment of this enigmatic disorder.

Case Description

• 35 year old female, no past medical or psychiatric history presented to ED after being sent by PCP with chief complaint of LE weakness. She stated symptoms started 2 weeks ago with myalgias, then weakness, then inability to walk, then inability to raise her hands. She was noted to be very tearful and disorganized in her thinking.
• Past medical history was significant for GERD with 30 pound weight loss over the past two months and insomnia over the past 6 weeks. She had never undergone surgery and only took trazodone 100 mg nightly for insomnia and prochlorperazine 10 mg BID for nausea.
• ROS was only positive for weight loss and lower extremity hypoesthesia and weakness. Vitals were within normal limits. Physical exam showed no intracranial abnormalities and MRI and CRP, ferritin, and CRP were normal.
• She was seen by C.L. psychiatry consult with no depressed or suicidal ideation. She spoke in a very loud voice, and her effort was very poor. She became extremely tearful and agitated, and physical exam findings changed in subsequent physical examinations (Figure 1).
• On the medical floor, patient underwent extensive workup. CT scan of her head showed no intracranial abnormalities and MRI and CRP, ferritin, and CRP were normal. She was alert but only oriented to person and time. She was extremely agitated, and told her colleagues that she was not able to walk. She spoke in a very loud voice, and her effort was very poor. She became extremely tearful and agitated, and physical exam findings changed in subsequent physical examinations (Figure 1).
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Treatment Course

Pharmacology
• Patient was started on risperidone 1 mg BID on the medical floor due to her liability and disinhibited thinking. These symptoms quickly resolved within the first few days of her admission, medication was titrated down, and eventually discontinued.
• She displayed some posturing and stupor in the initial phase of her hospitalization. Catatonia was suspected and lacked physical evidence that would be consistent with a structural or neurologic etiology. Her symptoms did not improve and she became extremely agitated, ruling out catatonia.
• She was eventually started on duloxetine for depression and anxiety, this was titrated to 60 mg daily. This had added benefit as pain relief for her concomitant neuropathic pain.

Obtaining Further History and Psychotherapy
• Patient lives with her mother, younger brother, daughter, 18, and son, 17.
• She applied to be a nurse as a teenager, became pregnant at the age of 18, dropped out of high school, and stayed home to raise her children.
• She later worked in various nursing homes as an aide. Most recently, she worked as a school bus assistant where she assisted disabled children getting on and off of the bus. She recalled pushing children around in wheelchairs, taking them to their doctor appointments.
• Her daughter went away out of state when the COVID-19 pandemic forced schools to close. She then drove to the campus to retrieve her daughter. There she met her daughter’s first boyfriend and learned that her daughter was now sexually active.
• Her symptoms started two to three weeks later.

Formulation: Patient feels STUCK. She had goals as a young woman that she could not pursue after she became pregnant. Now, she sees her daughter with a boyfriend and less focused on school, reminding the patient of herself. Ambulating has special meaning to the patient given her previous job. Her conversion symptom also forced family to constantly be around her (e.g. her daughter would move, feed, and wash her, perpetuating her symptoms).

Physical Therapy
• PT was consulted and worked with the patient every day of her hospitalization. She initially refused treatment, staying in her bed, demanding to be cleaned and changed, would have other patients push her wheelchair. With encouragement she began doing exercises in bed, progressing to pushing her own wheelchair, and using a walker. She would occasionally regress or refuse to participate. PT recommended that her wheelchair chair be taken away for prolonged periods of time. She was eventually able to walk the entire length of the ward with a walker.

Patient was transferred to a sub-acute rehabilitation unit.

Discussion

Conversion disorder is defined by DSM V as a disorder of altered voluntary motor or sensory function with incompatibility between the symptom and a known neurological or medical condition. Specifiers include weakness or paralysis, anesthesia or sensory symptoms, special sensory symptoms, seizures or status epilepticus, cognitive impairment, or paranoid ideation. This disorder is more common than you think! Keep it on the differential! – 20% 25% of patients in a general hospital setting have individual symptoms of conversion – In study of 3781 outpatients in neurology clinics, 5.4% diagnosed with FND and 30% had symptoms that could not be attributed to neuropathic disease – 12% of patients presenting with FND were due to their conversion disorder. Citation: Taitt, P., Dinan, T., & White, R. (2007). “Conversion and Malingering: Distinguishing Between the Two.” Current Opinion in Neurology, 20(1), 29–34. https://doi.org/10.1097/WCO.0b013e32800c31b9

• First studied by the French neurologist Jean Martin-Charcot, who coined the term “hystéria” for physical complaints that lacked organic causes. Sigmund Freud’s famous patient Anna O. (Figure 4), presented with a severe cough, paralyses of the extremites on the right side of her body, disturbances of vision, hearing, and speech, hallucinations, and loss of consciousness. Freud implied that her illness was a result of the resentement felt over her father’s real physical illness that led to his death. Her treatment was said to be start of psychoanalysis.

Speaking of psychoanalysis!
• The syndrome has a symbolic relationship to the unconsciously conflict and serves a purpose: it suppresses an emotion or resolves a dilemma, supports interpersonal relations, or helps escape conflicts.
• So think of what symptom it will not let them do! Ask “If this symptom were to go away tomorrow, would you now be able to do ___?”

Consider timing of symptom onset. If the patient presented within 3 days of the event, it was her daughter returning home from college with a new boyfriend.

We did not find that conversion disorder begins with delivery of diagnosis. It is imperative that the patient is not made to feel “it’s all in my head.” Rather, it should be relayed that a definitive diagnosis has been reached and steps taken to reach this diagnosis, such as obtaining a thorough EMG showing normal muscle activity, should be explained. Next, that conversion disorder is treatable and improvable, setting an expectation that they will get better. In the case of our patient, we assured her we were confident that her brain and her body were normal but that the connection between them was misinterpreted by their medications by explaining that serotonin was a chemical that her brain made to send signals to her muscles, that duloxetine would increase the amount of signals to improve movement. We emphasized this strategy in history gathering, comparing conversion disorder to a headache. We explained that if a picture was taken of the brain in someone experiencing a headache, it would be negative. Yet the person was still experiencing a headache. And just like a very bad headache, stress worsens conversion disorder. The patient was then able to discuss her symptoms and recent psychosocial stresses with more confidence.

A quick word on treatment: studies have shown that a multidisciplinary approach, with pharmacology to treat underlying depression and anxiety, CBT, and physical therapy, focused on functional motor, rather than strengthening of specific muscles is most effective in the treatment of this conversion symptom.

References


