

Introduction: Conversion disorder, or functional neurological symptom disorder, is characterized by a broad range of neurological symptoms, such as blindness, paralysis, or impaired sensation, without an identifiable neurological or medical cause. Classically patients with conversion disorder may exhibit “La Belle indifference,” in which they appear unconcerned about the neurological deficit. However, this phenomenon is not specific for conversion disorder¹. The pathogenesis of conversion disorder is largely unknown, but patients with conversion disorder may have increased rates of history of trauma, abuse, or comorbid psychiatric disorders¹⁻³. Some studies have suggested women are more likely than men to experience conversion disorder. Additional risk factors may include low socioeconomic status, lack of education, or a living in a rural population⁴. Conversion disorder can present with a wide variety of symptoms. There are multiple subtypes of conversion disorder such as psychogenic nonepileptic seizures (PNES) or psychogenic movement disorders (PMD). Physical exam findings in patients with conversion disorder may demonstrate inconsistencies in patients with a similar, true neurological cause of disease.

Conversion disorder is difficult to diagnosis as it requires exclusion of medical conditions and also attempting to determine if the patient is feigning symptoms¹. Common diagnostic testing may include neurological imaging or electroencephalogram (EEG), which can help rule out identifiable neurological causes of the conversion disorder symptoms⁵. However, some testing may not always be accessible to patients or cost effective⁶. Neurological imaging in patients with conversion disorder may show a variety of findings, such as decreased activation of motor control, sensory pathways, or emotional processing, compared to healthy individuals^{7,8}. Occasionally, conversion disorder may be misdiagnosed due to a missed underlying condition⁹. Treatment of conversion disorder often requires a multidisciplinary approach, and some proposed treatments include psychotherapy, pharmacotherapy, hypnosis, and transcranial magnetic stimulation^{10,11}. Treatment response is variable as some patients may have resolution of symptoms whereas other patients may have persistent or recurrent symptoms¹². Both the diagnosis and treatment of conversion disorder can be challenging.

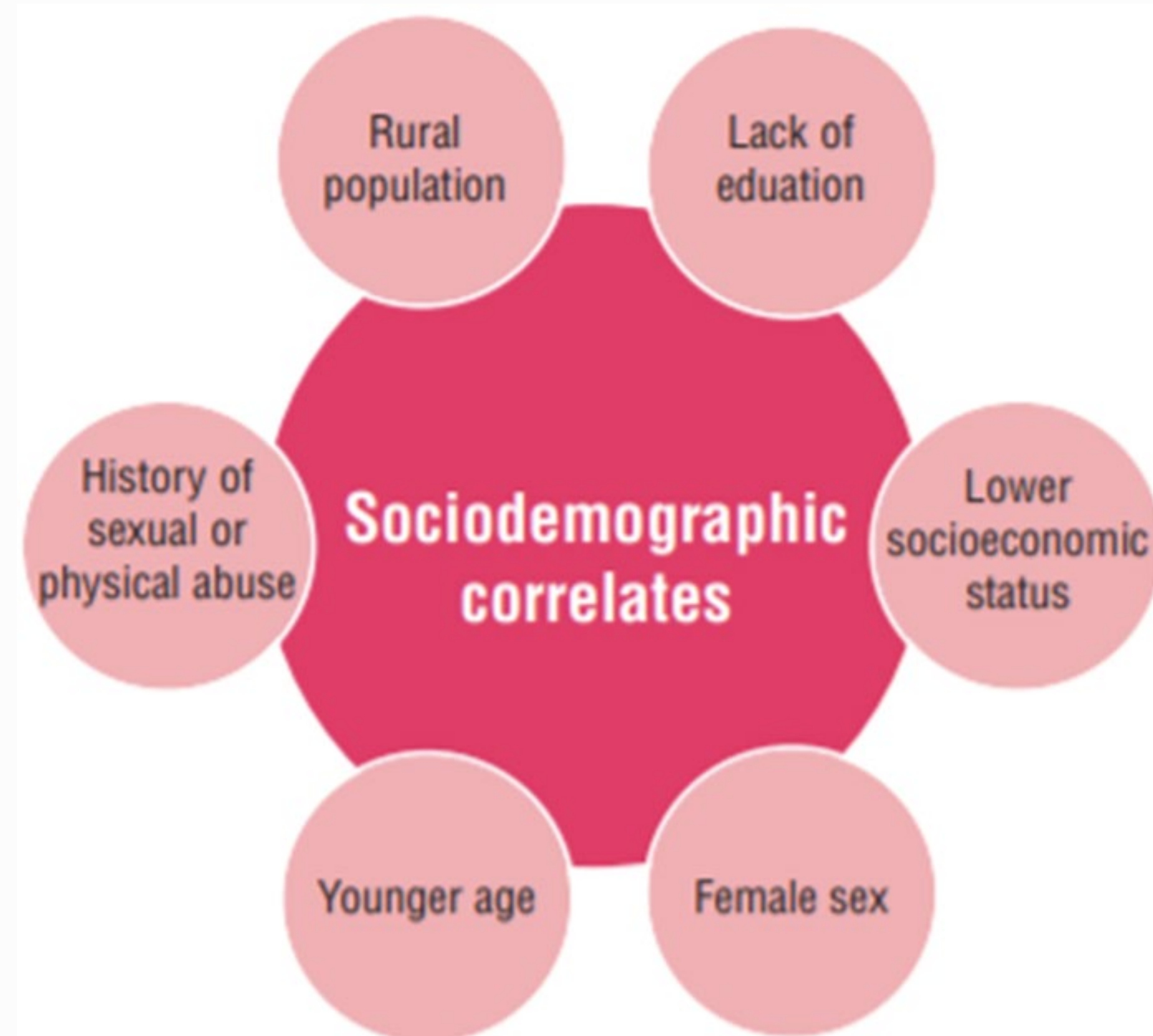


Figure 1. Risk factors associated with conversion disorder⁴

Case Presentation: Here we present the case of a 27-year-old female patient, with a past medical history of schizophrenia and borderline personality disorder, who was admitted to an inpatient psychiatric hospital. During the hospital course, the patient began displaying periodic, involuntary, abnormal movements and vocalizations which were precipitated by acute stress. Episodes included uncontrollable arm movements, such as flailing her arms or hitting herself in the face, as well as involuntary screaming and yelling. Some of the common stressors exacerbating the episodes included confrontation with staff about medications, therapy sessions, or interactions with other patients. The events began acutely and the patient had no neurological deficits or history of movement or impulse control disorders. Although the patient was admitted for her previously diagnosed psychiatric disorders, she became more focused and concerned about diagnosing these episodes that she believed to be a neurological disorder which would prevent her from being discharged. The patient's fixation with having an undiagnosed disorder compounded additional irritation and anxiety to her condition and seemed to increase the number of episodes. Additionally, the patient had a number of risk factors associated with conversion disorder, such as history of sexual abuse, comorbid psychiatric conditions, low socioeconomic and education status, a younger age, and female sex. Eventually, conversion disorder was discussed with the patient as a possible cause of her events. The patient seemed reasonably accepting of the conversion disorder diagnosis. Over time, the patient reported feeling less anxious and slowly the number of episodes decreased and her overall condition improved.

Discussion: Conversion disorder is an important diagnosis to consider for abnormal neurological events with no discernible cause. Diagnosing conversion disorder can help provide patients treatment and symptom relief. As seen with the patient, diagnosing conversion disorder helped improve her overall status as she had decreased anxiety over worrying about a true neurological disorder. The acute onset of episodes coupled with no focal neurological deficits and multiple risk factors for conversion disorder raised suspicion of the diagnosis. Additionally, after diagnosing conversion disorder, the patient seemed calmed by the diagnosis and had a drastic reduction in episodes. A sensitive discussion of conversion disorder can be difficult to manage as some patients may not accept the diagnosis. Emphasizing conversion disorder as a true disease, as opposed to fake symptoms, is important to help maintain a positive patient relationship. Long term treatment of conversion disorder is often multi-factorial and patient independent. Commonly proposed treatments include continual reassurance and support of the patient, psychotherapy, physiotherapy, pharmacotherapy, transcranial magnetic stimulation, or hypnosis^{4,6,10,11}. Diagnosis of conversion disorder can also help reduce unnecessary imaging or testing. As with our patient, treating any additional underlying psychiatric conditions may also help improve overall functioning and reduce symptoms of conversion disorder as well.

Conclusion: Conversion disorder is a rare but important consideration in patients with abnormal neurological symptoms. Prompt diagnosis and treatment help reduce symptoms and reduce unnecessary testing for patients. Additionally, treating underlying psychiatric comorbid conditions can likewise help improve symptoms.

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