



Somatic Symptom and Related Disorders in the Emergency Department

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Introduction

Somatic symptom and related disorders exist at the intersection between psychiatric disease and medical disease. Patients with these conditions present with bodily symptoms or concerns about having a disease. As such, they are more commonly encountered in general medical settings like the emergency department (ED) than in psychiatric environments like the acute mental health ward. Indeed, patients with somatization disorders use more primary care, emergency, and hospital resources even when controlling for other medical and psychiatric comorbidities [1]. However, psychiatric pathology drives their healthcare utilization.

The *Diagnostic and Statistical Manual (Fifth Edition)* (DSM-V) chapter on somatic symptom and related disorders represents a major update to the DSM-IV-TR chapter on somatoform disorders. This diagnosis group includes somatic symptom disorder, illness anxiety disorder, conversion disorder, and psychological factors affecting medical illness. The diagnostic criteria are described in Table 9.1 and discussed in this chapter. Factitious disorder is also included in

this group and reviewed separately in Chap. 14, “Malingering and Factitious Disorder in the Emergency Department.”

Differential Diagnosis

Case Example 1

Mr. Y. is a 68-year-old man with a history of generalized anxiety disorder and panic disorder who presents to the ED with chest pain. The pain is present at low intensity nearly all of the time but does worsen from time to time. There has been no pattern to the exacerbations. There are no associated symptoms, like nausea, diaphoresis, or radiation of the pain to the neck or left arm. He is worried that the pain is coming from his heart.

He suffered a heart attack a few years ago and had an automatic implantable cardioverter-defibrillator (AICD) placed. About 6 months after the heart attack, the AICD fired due to a run of ventricular fibrillation, saving Mr. Y.’s life. Since that time, however, Mr. Y. has had chest pain and a mental preoccupation with having another AICD firing. Reassurance that the pain is not cardiac in origin does not diminish the pain or worry that the chest pain may represent another cardiac event. The initial event happened when Mr. Y. was eating dinner—spaghetti with meat sauce and a diet soda. He has avoided these foods

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Table 9.1 Diagnostic criteria [2]

Diagnosis	Criteria
Somatic symptom disorder	Patient has somatic symptoms of clinical significance Patient has excessive thoughts, feelings, or behaviors related to the somatic symptoms, with disproportionate thoughts about the seriousness of the symptoms, high levels of anxiety about health, and/or excess time/energy devoted to these symptoms Symptoms persist for more than 6 months
Illness anxiety disorder	Patient has worry about having a serious illness Somatic symptoms are absent or mild, such that preoccupation with the illness is excessive or disproportionate Patient has high levels of health anxiety Patient either performs excess health-related behaviors or avoids health-related behaviors Condition lasts at least 6 months
Conversion disorder (functional neurologic symptom disorder)	Patient has alteration in motor or sensory function Clinical findings are incompatible with recognized neurologic or medical conditions The symptom or functional deficit causes significant impairment or distress
Psychological factors affecting other medical conditions	The patient has a medical condition Psychological or behavioral factors adversely affect the medical condition via exacerbation of the medical condition, interfere with treatment of the medical condition, serve as a health risk for the individual, and/or influence the underlying pathophysiology of the medical condition

ever since. He also avoids physical activity around the house and hobbies he used to enjoy, like golf, worrying that these will induce an attack.

Case Example 2

P. is a 12-year-old boy with a history of epilepsy that has been well managed with two antiepileptic drugs. He is brought to the emergency department by his parents for further evaluation and management after an attack that lasted 12 minutes. The patient has not had a seizure for almost 2 years, but his seizures have returned in the context of his parents' divorce. Now, the seizures are of a slightly different semiology than those before he was stabilized on medications. Instead of falling to the floor, he now seems to lower himself to the floor. His eyes are clenched closed during the attacks. He has had no urinary incontinence nor tongue biting. He also remembers some of what is said during the attacks.

These presentations will be familiar to ED clinicians. In these cases, the patient presents to the ED with symptoms of concern, though with

peculiar features inconsistent with somatic pathology. Regardless, the first step in working through the differential diagnosis is to assess for somatic pathology that could produce the symptoms of concern.

Once somatic pathology has been considered and the need for medical hospitalization excluded, it is important to note that somatic symptoms and worries about the presence of physical illness are found in a variety of psychiatric conditions. For example, a patient with panic disorder can experience panic attacks that include chest pain, palpitations, shortness of breath, dizziness, diplopia, auditory distortions, and so on. A patient with major depression may experience fatigue, sleep disturbance, poor appetite, and problems with concentration and memory. A patient with a psychotic disorder may experience somatic hallucinations or carry a delusion that their organs are diseased. As such, clinicians should consider common psychiatric illnesses like depression, generalized anxiety disorder, posttraumatic stress disorder, or schizophrenia. In the ED, the clinician should also consider the presence of suicidal or violent ideation or an inability to care for oneself that may require psychiatric hospitalization.

(See Chap. 20, “When to Admit the Psychiatric Patient.”)

Somatic symptom and related disorders are considered last among this psychiatric differential. Somatic symptom, illness anxiety disorders, and psychological factors affecting other medical conditions are considered if the symptoms or worries present are neither fully explained by a medical condition nor by another psychiatric condition. Conversion disorder can exist in the presence of another psychiatric illness.

Somatic Symptom and Related Disorders Diagnostic Group

Somatic Symptom Disorder

Somatic symptom disorder represents an excessive concern about the experience of one or more somatic symptoms out of proportion to the known seriousness of the medical condition underlying the symptom. Somatic symptom disorder may coexist with a diagnosed medical condition. The key is that the worry about the condition is out of proportion to the somatic pathology identified. Social or functional impairment in somatic symptom disorder arises because of the concern, anxiety, or worry about the symptom(s), leading to maladaptive behaviors. Case 1 has features of somatic disorder in that Mr. Y. worries about his pain and engages in avoidance of foods and activities that probably are not causes of worsening chest pain.

Illness Anxiety Disorder

Illness anxiety disorder represents mental preoccupation with having a serious medical illness, resulting in either excessive health-related behaviors (like checking for the disease) or maladaptive medical avoidance. Physical symptoms are either absent or mild. Social and functional impairment arises because of the preoccupation with the illness. The patient in Case 1 also has features of illness anxiety disorder in that Mr. Y. is worried about having a cardiac event (e.g.,

acute coronary syndrome or discharge of his AICD) and presents to the ED as part of his checking behavior.

Conversion Disorder

Conversion disorder (also known as functional neurologic symptom disorder) involves an alteration of neurologic functioning that is incompatible with known neurologic or medical conditions. Patients with conversion disorder tend to have dissociative qualities, such that they may present without worry about even catastrophic neurologic dysfunction. This feature can help distinguish this condition from a somatic symptom disorder featuring worries about neurologic symptoms or illness anxiety disorder featuring worries about a neurologic syndrome. Case 2 illustrates conversion disorder in a patient who presents with symptoms concerning for a seizure, though with multiple features that are inconsistent with an epileptic event. Partial dissociation is demonstrated by the patient’s partial memory of events happening during his spells.

The evaluation of conversion disorder primarily focuses on neurologic conditions that can produce symptoms similar to those experienced by the patient. Thus, a comprehensive neurologic assessment is critical when conversion disorder is suspected. Table 9.2 lists a number of validated neurologic exam findings and studies that are not compatible with known neurologic conditions and, therefore, suggests the presence of conversion disorder.

Conversion disorder cases in the ED can be particularly vexing because the presentation is often dramatic and reflective of a serious neurologic condition for which immediate action is needed, like a stroke or seizure. For example, patients with conversion disorder mimicking seizures, also known as psychogenic nonepileptic spells, can present in nonepileptic psychogenic status [5]. Of note, one study found that patients whose “seizures” are recalcitrant to high-dose benzodiazepines and who have a venous port system are more likely to present with psychogenic status rather than status epilepticus [6].

Table 9.2 Selected validated exam and study findings to establish conversion disorder [3, 4]

Neurologic symptom	Exam/study finding suggesting conversion disorder
Motor	<p>Hoover sign: paretic leg moves when testing hip flexion for contralateral leg</p> <p>Abductor sign: leg that is paretic under active hip abduction exerts resistance to examiner forced adduction</p> <p>Abductor finger sign: finger abduction against examiner resistance for 2 minutes in functional hand reveals synkinetic abduction finger movement in contralateral/paretic hand</p> <p>Spinal injury test: with patient supine, leg flexed at knee holds position against gravity despite report of paresis</p> <p>Collapsing/give-away weakness: limb collapses under minimal pressure or normal strength suddenly gives way</p> <p>Co-contraction: contraction agonist and antagonist muscle groups to keep limb in fixed position during exam</p> <p>Motor inconsistency: muscle that has two functions (e.g., hip flexion and knee extension) can perform one function but not the other</p>
Sensory	<p>Midline splitting: sensation goes from present to absent exactly at midline</p> <p>Splitting of vibration: sensation is different on left vs. right side of bones that cross midline (e.g., sternum or frontal bone)</p> <p>Nonanatomic sensory loss: sensation does not fit known dermatomes</p> <p>Inconsistent or changing pattern of sensory loss</p>
Gait	<p>Dragging monoplegic gait: leg is dragged instead of performing circumduction</p> <p>Chair test: patient is able to propel a wheeled chair despite reports of not being able to walk</p>
Seizure	<p>Spell semiology</p> <ul style="list-style-type: none"> Long duration Gradual onset Fluctuating course Side-to-side head or body movements Eyes closed during episode Memory recall Absence of postictal confusion <p>Exam findings/provocative testing</p> <ul style="list-style-type: none"> Low ictal and postictal heart rate Resistance to noxious stimuli (e.g., forcing open eyes to test corneal reflex) Resolution of spell with noxious stimuli (e.g., foul smell or pressure to nail bed) Voluntary saccades followed by deviation away from examiner when head is turned Resolution of the spell with instruction/reassurance from examiner <p>Lab studies</p> <ul style="list-style-type: none"> Normal postictal lactate Normal postictal prolactin Normal intraictal video EEG (gold standard)

Psychological Factors Affecting Other Medical Conditions

This diagnosis reflects the notion that individuals may engage in behaviors that are contrary to medical treatment goals. The maladaptive behaviors can be as broad as treatment nonadherence and dietary indiscretion or as narrow as anxiety exacerbating shortness of breath. The critical difference between this diagnosis and others within the diagnostic group is that the psychological factors generate social and functional impairment by

adversely affecting a medical condition. If the psychological factors in question are better explained by a psychiatric diagnosis outside of this group, like major depressive disorder, then the diagnosis of psychological factors affecting other medical conditions is excluded.

Therapeutic Three-Step Approach

Each of these diagnoses shares the characteristic that psychological factors interdigitate with and sometimes exacerbate physical symptoms.

Patients present to the ED seeking redress for what they consider to be a physical (or somatic) emergency, whereas psychological factors are at the core of their pathology. ED providers, however, are obligated to ensure that there are no emergencies present in every patient who presents to the ED. As such, patients with somatic symptom and related disorders who present to the ED often gain themselves the “million-dollar workup,” resulting in expense for the hospital system and increased wait times for others in the ED, often only to get the answer that there is nothing wrong with them.

Here, we present a three-step clinical approach to address patients with somatic symptom and related disorders [7–9].

The first clinical step to consider is to limit the workup to only that which is absolutely needed to rule out a somatic emergency. In the prototypic cases presented above, psychiatric illness is comorbid with physical illness, and the symptoms present may merit the use of multiple consultants, extensive serum and radiographic testing, and/or admission to the hospital to ensure that the presenting concern does not represent a somatic emergency. The pursuit of this full workup when the likelihood of a positive result seems low exposes the patient to iatrogenic risk, as well as psychological reinforcement that significant somatic pathology exists. The extent of necessary workup always entails clinical judgment. However, each clinician should have a threshold at which to say that the ED workup carries more risk than benefit and defer further evaluation to an outpatient setting. One study in a primary care setting found that somatic illness is not often missed in patients with medically unexplained somatic symptoms [10].

Each of the diagnoses discussed in this chapter has positive diagnostic criteria developed so as to exclude the need to exclude all possible somatic pathologies that may present with the symptoms in question. Even conversion disorder can be established prospectively in the ED [11] and without the need for an extensive workup. Establishing a psychosomatic diagnosis may also lead to a reduction in the use of emergency resources to address what is not an emergency. In

one prospective study, diagnosis of psychogenic nonepileptic spells led to a 51% reduction in ED use for neurologic symptoms [12], and a second study found a 91% reduction in ED use among patients after a diagnosis of psychogenic nonepileptic spells [13].

The second clinical step is to attempt to move the patient’s focus away from their physical complaints. Patients often think about their body and mind as two separate and distinct objects, and think that a physical symptom necessarily means that the pathology is in the body, rather than the mind. Discussion about the neurologic basis for mental experiences may help the patient accept that the body influences the mind, and vice versa. Moving the conversation from a mutually exclusive paradigm of body versus mind invites the patient to consider a role for mental health treatment. This conversation needs to happen in a very supportive fashion. Patients with chronic somatic symptom and related disorders have all too often left medical encounters hearing, “There is nothing wrong with you,” or, “It is all in your head.” However, their suffering is real, and they want a plan to resolve the suffering. ED clinicians should validate patients’ distress to ensure that the patient does not feel rejected by the health system or feel their suffering is being minimized.

The third clinical step is to feel confident in referring or retreating. If the patient accepts a mental health referral, then the clinician should facilitate connection with treatment. This would be a reasonable time to involve a psychiatrist for an independent (psychiatrist and patient) or joint (psychiatrist, medical or neurology consultant, and patient) consultation. Treatments for somatic symptom and related disorders are typically longer term, so the main goal of the consulting psychiatrist is to build motivation for outpatient follow-up. If the patient holds to the notion that what they are experiencing is a somatic concern, then the ED provider can retreat, knowing that serious somatic emergencies have been ruled out and the patient can safely leave the ED. A primary care provider can reattempt this conversation and referral to mental health at a later time.

Of the four somatic symptom disorders discussed above, conversion disorder carries the

greatest risk of impaired insight into the condition and, therefore, provides the greatest challenge in terms of moving the conversation from the somatic to the psychosomatic. Patients with somatic symptom disorder, illness anxiety disorder, and psychological factors affecting other medical conditions tend to maintain awareness that mental factors may be affecting the course of their physical illness and thus may be more willing to accept the involvement of mental health professionals, if only as adjuncts to their somatic evaluation and treatment. All the same, receiving the diagnosis of conversion disorder and treatment early in the illness course correlates with improved clinical outcomes [14, 15]. This correlation highlights the importance of moving the treatment conversation toward the psychosomatic as early as possible, even in the ED.

Patients with conversion disorder may also still warrant hospitalization. Even if the patient accepts that their condition has roots in mental illness, they may not have sufficient recovery in function to allow discharge. For example, a patient with lower extremity paralysis due to conversion disorder may be unable to ambulate or transfer to a toilet or wheelchair. A patient in this category may be considered gravely disabled by their psychiatric illness, depending on local laws and practice patterns. Whether the patient is admitted to the psychiatry hospital or to a general medical floor depends on the local availability of nursing services and treatment capacity. For example, a psychiatric specialty hospital may not have access to seizure pads, machines to lift the patient in and out of bed, equipment to prevent pressure sores, or physical therapy expertise. At the same time, the medical hospital may not have access to the mental health expertise needed to push the patient toward full recovery. Successful disposition requires a collaborative decision among multiple services with the patient's best interests in mind.

Longer Term Treatment

Evidence on the definitive treatment of somatic symptom and related disorders is thin. However, there is literature to support structured treatment

modalities and medications from a primary care or specialty environment. Patients with a somatic symptom or illness anxiety disorders benefit from frequent structured primary care visits to address worries and initiate testing as needed. Such patients also benefit from cognitive-behavioral therapy and tricyclic antidepressants or selective serotonin reuptake inhibitors [16].

Patients with conversion disorder are often diagnosed and treated in a neurology specialty environment. Such patients benefit from weaning off unnecessary medications, like antiepileptic medications, and initiation of cognitive-behavioral therapy and/or selective serotonin reuptake inhibitors. Interestingly, patients with motor-symptom conversion disorder may benefit from referral to physical therapy to help them regain function. Other treatment modalities that have been studied include transcutaneous electrical nerve stimulation (TENS), transcranial magnetic stimulation (TMS), biofeedback, and sedation [17, 18].

Conclusions

Somatic symptom and related disorders represent a set of conditions where somatic symptoms are the focus of concern, whereas the pathology lies more in the mind. When patients with these conditions present to the ED, the primary concern is to exclude psychiatric or somatic emergencies and thereafter defer the remainder of the workup to the outpatient setting. ED providers should take advantage of the opportunity to help the patient to consider the possibility of mental pathology and consider consultation with a mental health provider.

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