Somatic Symptom and Related Disorders

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21.1 Vignettes

Vignette 1. An 11-year-old girl was admitted to the pediatrics service for inability to walk due to paralysis of her left lower extremity. One morning, upon awakening, she found that she was unable to move her left thigh and leg and had to stay in bed. On admission, she had flaccid paralysis of her thigh and legs as well as stocking-like hypoesthesia. All labs and imaging studies were within normal limits except for slight anemia. Hoover sign (Chap. 34) was positive. The patient told the psychiatric consultant that she and her family had recently moved from another city, and she had enrolled in a new school where she had no friends. She missed her old friends, particularly a boy with whom she was close, which she kept a secret from her parents. As she talked about how much she missed her old school, she felt that she was beginning to feel some more sensation in her left leg and thigh. The consultant recommended physical therapy. In 2 days' time, the patient recovered enough movement and sensation in her left extremity that she was able to be discharged. In the meanwhile, she and her parents agreed that she could phone her old friends frequently. A psychiatric follow-up appointment was made.

Vignette 2. A 35-year-old woman who works as a nurse's aide in a convalescent home was admitted to the medical service with high fever of unknown origin. Labs revealed neutrophilic leukocytosis with shift to left. Vital signs revealed

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sinus tachycardia with high fever (104 F). Blood culture revealed *E. coli* septicemia. During the night, the nurse happened to notice that she was injecting something into her IV line. The syringe the patient used to inject into her IV line turned out to contain fecal material.

Vignette 3. A 43-year-old woman, who is on disability from long-standing epilepsy, was admitted to the hospital for increasing seizures. During a previous hospitalization, a 24-h EEG showed generalized seizure activity while she was having a grand mal seizure. Lately, however, she was also experiencing seizures during which she was "thrashing about" and at least partly conscious. Another 24-h EEG revealed only movement artifacts and no seizure activity. A psychiatric consultation was requested for "pseudoseizures." During interview, the patient told the consultant that she had increased stress at home because her daughter had lost her job and moved in with her with her three young children. The daughter was addicted to drugs and the patient found herself having to care for the young children as well as her husband, who was disabled with advanced complications of diabetes mellitus.

21.1.1 Introduction

Somatic symptom disorder is a new diagnostic category in DSM-5 and is characterized by the prominence of somatic symptoms associated with significant distress and impairment (APA 2013). In contrast to DSM-IV which emphasized the absence of medical explanation for the symptoms, DSM-5 emphasizes the *positive symptoms and signs of distressing somatic symptoms plus abnormal thoughts*, *feelings*, *and behaviors in response to these symptoms*.

The category of somatic symptom and related disorders includes somatic symptom disorder, illness anxiety disorder, conversion disorder (functional neurological symptom disorder), psychological factors affecting other medical conditions, factitious disorder, and other specified and unspecified somatic symptom and related disorder. In DSM-5, five of the DSM-IV diagnoses, i.e., somatization disorder (Briquet's Syndrome), undifferentiated somatoform disorder, hypochondriasis, pain disorder associated with psychological factors, and pain disorder associated with both psychological factors and a general medical condition, are reduced to just two—somatic symptom disorder and illness anxiety disorder (Dimsdale et al. 2013). Approximately 75 % of patients who would have been diagnosed as hypochondriasis according to DSM-IV would now, according to DSM-5, be diagnosed with somatic symptom disorder (because they have one or more somatic symptom), while about 25 % who do not have any somatic symptom would be diagnosed with illness anxiety disorder.

Of special note is that what used to be called *pain disorder* (*chronic pain syndrome*, *psychogenic pain*, *pain disorder associated with psychological factors*, *etc*.) is now just a part of somatic symptom disorder. As chronic pain is an important entity in CL psychiatry, it is discussed in further detail in Chap. 22.

21.2 Historical Considerations

The classical diagnosis of hysteria involved physical symptoms, which were postulated to be caused by wandering uterus (*hystera* in Greek) by Hippocrates (b. 460 BCE) (Meyer 1997). It was considered to be confined to females. According to this theory, various symptoms of hysteria were caused by the interaction of the uterus with other organs. For example, if the uterus comes towards the liver, the female suddenly becomes speechless and clenches her teeth. The treatment was pushing beneath the liver with the hand and tightening a bandage below the ribs, and by opening the mouth and administering a most fragrant wine, followed by the application of malodorous fumigations into the nostrils (Olsen, 1994). More "definitive" treatments included attempts to tie down the uterus through pregnancy or keeping it moist through frequent intercourse so that it would not try to seek out the moisture of other organs (Meyer 1997).

During the dark ages and early Renaissance, irrationality and misogyny prevailed. Malleus Maleficarum (The Witches' Hammer, 1487), written by two Dominican inquisitors, Spenger and Kramer, set forth the procedure for diagnosis (torture) and treatment (execution) of witches, many of whom were suffering from mental disorders including hysteria. For example, a sign of being a witch was to have an anesthetic spot on the skin.

Hysteria became the subject of intense investigation in the nineteenth century, when it seems the prevalence was quite high. Jean Martin Charcot (1825–1893), Professor of Neuropathology and Physician in Charge at Salpetriere Hospital in Paris, obtained worldwide renown for his use of hypnosis in diagnosing and treating hysteria. He believed that susceptibility to hypnosis was pathognomonic of hysteria, a condition that he believed was caused by a degeneration of the brain. His pupils included Sigmund Freud, Joseph Babinski, Pierre Janet, Georges Gilles de la Tourette, and Alfred Binet.

Sigmund Freud (1856–1939) learned hypnosis under Charcot, returned to Vienna to practice its use in treating hysteria, and wrote, with his colleague and mentor, Josef Breuer, *Studies on Hysteria* (1895), which postulated that the patient's psychological traumas and conflicts caused the symptoms of hysteria. Freud eventually gave up the use of hypnosis in favor of free association, and founded psychoanalysis.

The term, *conversion*, is based on psychoanalytic theory. If an external stimulus or situation threatens to awaken a repressed psychological conflict, the ego converts the psychological conflict into a somatic symptom that represents a symbolic resolution of the conflict. For example, someone a person meets may unconsciously remind him of his father, toward whom he has murderous impulses. The impulse must be repressed because it can cause overwhelming anxiety if it became conscious. The patient's right arm becomes paralyzed, the arm with which the patient might have attacked the father figure. The resolution is that he cannot strike the person (father symbol) as the arm is paralyzed, appeasing the superego, but at the same time the paralysis draws attention to the instrument of aggression, thus partly serving the id's murderous impulse. The *primary gain* in the conversion syndrome is the prevention of the overwhelming anxiety that would arise if the psychological conflict were to become conscious. The *secondary gain*, a commonly used term, is any potential benefit arising from being sick (in this case, paralyzed), such as attention, not having to go to work, etc. Conversion disorder is the only diagnosis in the DSM III/IV and DSM-5 that, at least in name, presumes a psychodynamic etiology.

Conversion symptoms are now considered to be body language expressions of a psychological distress that may be determined by many factors including psychodynamic, cultural, socioeconomic, and genetic-constitutional factors (Maisami and Freeman 1987).

DSM II used the term, *psychophysiologic disorders*, to denote emotional factors affecting physical symptoms, especially those resulting from autonomic activation due to stress. The term was used in contradistinction to *conversion disorder* which denoted symptoms attributable to motoric, somatosensory, and special senses. *Psychophysiologic disorders* were what remained of the "psychosomatic" illnesses (See Chap. 1).

DSM-5 recognizes that, while the "classical psychosomatic" illnesses such as ulcerative colitis and peptic ulcer are no longer believed to be any more "psychosomatic" than immunologic/infectious, there is wide acceptance of the notion that psychological factors such as stress and coping styles contribute to the state of immunocompetence and even cellular aging (Entringer et al. 2013; Epel et al. 2004; Shalev et al. 2013). DSM-5 now includes these syndromes within Psychological Factors Affecting Other Medical Conditions discussed below.

Strictly speaking, conversion symptoms should be considered to be a subset of *psychological factors affecting medical condition*, and we use the latter broad diagnostic term for both syndromes although this is not exactly correct use of the terminology according to DSM-5 as it splits off neurologic symptoms into *conversion* (*functional neurological symptom*) *disorder*. Thus, we would diagnose both Vignette 1 and

Vignette 3 as psychological factors affecting medical condition, although they would both qualify for conversion disorder in DSM-5.

21.3 Somatic Symptom Disorder

DSM-5 defines somatic symptom disorder as one or more somatic symptoms that are distressing or result in significant disruption in daily life and excessive thoughts, feelings, or behaviors related to the symptoms or related health concerns with at least one of the following: (a) excessive and persistent thoughts about the seriousness of the symptoms, (b) persistently high level of anxiety about health or symptoms, or (c) excessive time and energy spent on these symptoms or health concerns. It also specifies that the state of being symptomatic should be persistent (typically more than 6 months) even if any one somatic symptom may not be continuously present. The specifiers may be: with prominent pain, persistent, and severity specifiers or mild, moderate, and severe.

According to DSM-5, patients with these disorders typically have multiple symptoms including pain, and the symptoms may be specific or general (e.g., fatigue). The symptoms may or may not be associated with another medical condition, e.g., a patient may be disabled with somatic symptom disorder following an uncomplicated myocardial infarction.

The prevalence of somatic symptom disorder is estimated to be 5–7 % in the general population, and more in females than in males (APA 2013).

Many factors underlie the predisposition to somatic symptom disorder including genetic factors interacting with experiential factors such as childhood abuse, the development of temperamental neuroticism (Laceulle et al. 2013; Vinberg et al. 2013), and the trait of somatic amplification (Barsky et al. 1988; Freyler et al. 2013; Geisser et al. 2008; Yavuz et al. 2013). Other contributing factors include recent stress, low socioeconomic and educational status (thus lower coping skills), and cultural influences (e.g., emotional distress expressed as somatic discomfort/pain).

There is high comorbidity with both medical diseases and depression and anxiety.

Treatment of somatic symptom disorder should be multifaceted and include a recognition of the distress experienced by the patient, an explanation of the mind's tendency for somatic amplification in some individuals, reassurance that there will be careful medical observation and follow-up of the symptoms, stress management and relaxation training including mindfulness training (Reif et al. 2013; Zangi et al. 2012), activity/exercise therapy, and cognitive behavioral therapy (Hoerster et al. 2012; Nakao et al. 2001; Voigt et al. 2013). Antidepressants, hypnotics, and anxiolytics may be judiciously utilized when target symptoms are present. Duloxetine may be particularly useful in patients with prominent pain symptoms (and it is advertized as a pain medication), and mirtazapine may be useful in patients who have both insomnia and depressive symptoms.

Secondary gain can be prominently influencing symptoms in certain settings, such as chronic pain treatment settings and disability compensation. In these settings, medications should be used very cautiously due to the likelihood that target symptoms may be exaggerated, and drugs can psychologically reinforce them. See Chap. 22 for further discussion of treatment of chronic pain.

21.4 Illness Anxiety Disorder

As discussed earlier, about 3/4 of patients diagnosed previously with hypochondriasis who have physical symptoms of some kind now belong to the somatic symptom disorder category, and the remaining 1/4 of patients *without* any physical symptoms but who have excessive worries about being sick now attain the diagnosis of *illness anxiety disorder*.

A more detailed discussion of *hypochondriasis*, which is no longer a DSM diagnosis, is found in Chap. 23.

DSM-5 defines illness anxiety disorder as preoccupation with having or acquiring a serious illness *and* somatic symptoms are *not* present, or if present, are only mild in intensity. If another medical condition or a high risk of developing a

medical condition (e.g., strong family history) is present, the preoccupation is clearly excessive or disproportionate. There is a high level of anxiety about health and the person is easily alarmed about health status, and engages in excessive health related behaviors (e.g., repeated checks for signs of illness) *or* engages in maladaptive avoidance (e.g., doctor's appointments, hospitals). DSM-5 further requires that an illness preoccupation has been present for at least 6 months. Two specifiers are provided: care-seeking type and care-avoidant type.

Illness anxiety disorder is quite frequently seen in medical and primary care settings. The prevalence ranges from 1.3 to 10 % in community surveys, and in ambulatory medical populations, 3–8 % (DSM-5). There is no gender difference.

This disorder may be precipitated by major life stress or threat to health. About 1/3–1/2 of patients with this disorder have a transient form (DSM-5).

Basic principles of treatment for somatic symptom disorder discussed above apply to illness anxiety disorder, including careful monitoring and follow-up, cognitive behavioral therapy, mindfulness training, psychoeducation, as well as SSRIs (Greeven et al. 2009; Hedman et al. 2010; Lovas and Barsky 2010; Williams et al. 2011).

21.5 Conversion Disorder (Functional Neurological Symptom Disorder)

21.5.1 Definition

DSM-5 defines conversion disorder as one or more symptoms of altered voluntary or sensory function *and* an incompatibility between the symptom and recognized neurological or medical conditions. The symptom or deficit must also cause clinically significant distress, impairment in social, occupational, or other areas of function, or warrants medical evaluation. Specifiers include by symptom type (with weakness or paralysis, with abnormal movement, with swallowing symptoms, with speech symptom, with attacks or seizures, with anesthesia or sensory loss, with special sensory symptom—e.g., visual, olfactory, auditory, with mixed symptoms), acute episode or persistent, and with psychological stressor or without psychological stressor.

21.5.2 Clinical Presentations

Common presentations include paralysis or paresis of a limb, glove-like anesthesia, seizures, blindness, and mutism. In conversion disorder, there is often a history of multiple somatic symptoms. The onset is often associated with psychological stress or trauma, and dissociative symptoms such as derealization, depersonalization, and dissociative amnesia.

Transient conversion symptoms are common, but the exact prevalence is unknown. According to DSM-5, the onset of nonepileptic seizures peaks in the third decade, and motor symptom onset peaks in the fourth decade. The prognosis is considered to be better in younger children than in adolescents and adults. Conversion disorder is 2–3 times more common in females than in males.

21.5.3 Contributing Factors

History of childhood abuse or neglect may be predisposing factors as well as maladaptive personality traits. Stressful events often precipitate the symptom (Nicholson et al. 2011). There may be some neurologic basis for conversion symptoms, particularly relating to the CNS processing of stress. Recent studies show that conversion symptoms are associated with functional brain changes (Burgmer et al. 2006; Vuilleumier 2005). Functional neuroimaging studies indicate that there are selective decreases in the activity of frontal and subcortical circuits involved in motor control during conversion paralysis, decreases in somatosensory cortices during conversion anesthesia, and decreases in visual cortex activation during conversion blindness. There is also increased activation in limbic regions, such as cingulate and orbitofrontal cortex in conversion

syndrome (Aybek et al. 2008; Perez et al. 2012; Scott and Anson 2009).

Comorbidities include anxiety disorders, particularly panic disorder, depressive disorders, as well as other somatic symptom disorders. Comorbidities with other medical conditions are also common, especially seizure disorder.

21.5.4 Diagnosis

The diagnosis is often a diagnosis of exclusion of physical diseases that might explain the symptom. The conversion symptom itself is not associated with peripheral tissue pathology except for possible disuse atrophy.

If the symptom of anesthesia is incompatible with the dermatome, or paralysis of an extremity is positive for the Hoover sign (See Chap. 34), then a presumptive diagnosis of conversion may be made. The presence of stress, past history of unexplained somatic symptoms, and identifiable psychological conflict that may underlie the symptom are important considerations in making the diagnosis of conversion disorder. It should be emphasized, however, that all of the above may also be present, and, in fact, may precipitate or exacerbate a medical disease. Conversion is largely a diagnosis of exclusion, and a retrospective one, as the symptoms often clear spontaneously. Conversion "hysteria" has been frequently misdiagnosed, i.e., symptoms of a medical or a neurological disease, particularly multiple sclerosis, have been attributed to conversion. The rate of such misdiagnosis, however, has been declining (29 % in 1950s, 17 % in 1960s, and 4 % since 1970s) (Stone et al. 2003). However, as late as 2002, up to 50 % of patients diagnosed with conversion motor paralysis, an organic medical condition was found (Heruti et al. 2002).

21.5.4.1 Hypnosis and Sedative Interview as a Diagnostic Tool

Hypnosis is used today primarily as an adjunct in diagnosing the conversion component of a medical symptom. As hypnosis is a dissociative state in which memories and ideas that are not normally conscious can become accessible, the psychological meanings of physical symptoms may become clear. To the extent that psychological factors that may have caused the conversion symptoms might be attenuated in hypnotic state (disinhibition), paralysis of muscles in conversion syndrome may become functional during the hypnotic state (including reversal of mutism), as well as dysfunction of organs of special senses, such as conversion blindness or deafness (Halligan et al. 2000). It is important to note, however, that any dysfunction, including organic ones, may be ameliorated to an extent under hypnosis due to the strong motivation hypnosis elicits. (See Chap. 34 for further discussion). Likewise, sedative drugs such as lorazepam and sodium amytal can be administered intravenously to induce a semiconscious state with reduced cortical inhibitory activity. As in hypnosis, psychological factors associated with a physical symptom may be elucidated in that state, as well as reversal of the dysfunction. When symptom removal has been demonstrated during either hypnosis or drug-induced semiconscious state, it is important to give the suggestion to the patient that she/he will be able to maintain the function after the session to the extent the patient is able. This permits the patient to maintain, reduce, or be relieved of the symptom to the extent permitted by the psychological conflict that caused it.

21.5.5 Treatment

As conversion symptoms often resolve spontaneously, an important goal of treatment is to prevent secondary complications such as disuse atrophy or excessive secondary gain that may work against recovery.

Physical therapy is often the treatment of choice for paralysis or paresis. In addition to preventing disuse atrophy, it provides both a motivation and a face-saving reason for recovery (Ness 2007; Oh et al. 2005). Likewise, speech therapy is indicated for mutism (Bota et al. 2010).

Psychotherapy is indicated both to deal with the underlying psychological conflicts and states (e.g., depression, anxiety) that may have resulted in the body language expression (symptom) as

well as to reduce the noxious effects of stress. Various forms of psychotherapy may be utilized, including exploratory psychotherapy, narcoanalysis, cognitive-behavioral therapy, and family and supportive therapies. In a case of globus hystericus, successful behavioral treatment has been reported (Donohue et al. 1997).

Pharmacotherapy is indicated for associated or underlying conditions such as depression (Hurwitz 2004).

21.6 Psychological Factors Affecting Other Medical Conditions

21.6.1 Definition and Diagnosis

In the sense that the physical symptoms are prominently affected by psychological factors, all somatic symptom disorders may be considered to be a subset of psychological factors affecting a physical condition. According to DSM-5, however, this diagnosis has the essential feature of the presence of one or more clinically significant psychological or behavioral factors that adversely affect a medical condition by increasing the risk for suffering, death, or disability. These factors may have influenced the course of the medical condition by a close association between the psychological factor and the onset, development, exacerbation of the medical condition, or delayed recovery from the medical condition. The factors may also interfere with the treatment of the medical condition, or they may constitute additional health risks, or the factors may influence the underlying pathophysiology, precipitation or exacerbation of the symptoms, or necessitate medical attention. The specifiers may be mild, moderate, severe, and extreme (e.g., life-threatening on ignoring of heart attack symptoms).

DSM-5 states that psychological and behavioral factors include psychological distress, patterns of interpersonal interaction, coping styles, and maladaptive behaviors such as denial of symptoms or poor adherence to medical regimen. Common clinical examples include anxiety exacerbating asthma, a diabetic patient manipulating insulin to lose weight, a woman ignoring a lump in the breast, etc. Takotsubo cardiomyopathy and hypertension arising from chronic occupational stress are given as examples. Thus, affected medical conditions in this category can be those with clear pathophysiology (e.g., diabetes, cancer), functional syndromes (e.g., irritable bowel syndrome, fibromyalgia), or idiopathic medical symptoms (e.g., pain, fatigue, dizziness), but excludes functional neurologic symptoms which are categorized under conversion Disorder.

DSM-5 states that the diagnosis of psychological factors affecting other medical conditions should be reserved for situations in which the *effect* of the psychological factor on the medical condition is evident, and abnormal psychological or behavioral symptoms that develop as a result of a medical condition should be diagnosed as an adjustment disorder.

In any case, *psychological factors affecting medical condition* presupposes an identifiable medical condition. Psychological factors may then be identified that may have contributed or may be contributing to the precipitation, exacerbation, course, and treatment/rehabilitation of the patient. The psychological factors may be psychiatric syndromes or symptoms, personality traits, stress, etc. This is a useful diagnosis as many medical diseases and symptoms are exacerbated or exaggerated by stress, anxiety, and depression, and, in fact, "psychogenic" symptoms may coexist with an organic disease. We recommend the use of the term, psychological factors affecting medical condition to include all somatoform (somatic symptom) conditions with the exception of illness anxiety disorder and factitious disorder, particularly in CL settings, as it tends to reduce the organic vs. psychogenic dichotomy in complex medical complaints. At the same time, making the diagnosis often helps to include the psychological factors in the overall treatment plan.

Prevalence of this condition is unknown, but DSM-5 states that this is a more common diagnosis than somatic symptom disorders in U.S.

private insurance billing data. This is not surprising as many CL psychiatrists will use this diagnosis to encompass conversion disorder and somatic symptom disorder diagnoses as well as stress-induced medical conditions and other conditions affected by psychological factors.

21.6.2 Treatment

Treatment should be geared for both the medical condition and the psychological factors that affect it.

Stress management, relaxation training, mindfulness training, supportive psychotherapy and family therapy are some of the modalities that should be considered in stress-related conditions (Fish et al. 2013; Lipschitz et al. 2013; Solomon et al. 1984). Psychoeducation and treatment of depression is important in problems with adherence and rehabilitation (Belzeaux et al. 2013; Garcia-Perez et al. 2013; McGillicuddy et al. 2013; Monroe et al. 2013).

If anxiety and/or depression is present, appropriate medications should be considered. Some patients may be physiologically hypersensitive to anxiety in the particular organ system, such as diarrhea and tachycardia, and may respond well to relatively high doses of benzodiazepines. Sufficient doses of benzodiazepines should be prescribed for such patients as there is no evidence that they become habituated to it as long as it is used short term (Lasagna 1977). The CL psychiatrist should make it clear that benzodiazepines should only be used short term as chronic use may cause habituation and addiction, especially short acting benzodiazepines such as alprazolam. For some patients with prominent cardiovascular symptoms associated with stress, or for performance anxiety, beta-blockers, particularly propranolol may be helpful in relatively small doses (e.g., propranolol 10 mg tid prn either PO or sublingually). Stress-induced and functional syndromes (e.g., irritable bowel syndrome, pseudoseizure) are best conceptualized as a neurobiologic syndrome requiring an integrated approach (Sharpe and Carson 2001; Stone et al. 2012).

21.7 Factitious Disorder

21.7.1 Definition and Clinical Presentations

According to DSM-5, the essential feature of factitious disorder is the falsification of medical or psychological signs in oneself or others that are associated with the identified deception. Factitious disorder imposed on self is defined as: (a) falsification of physical or psychological signs or symptoms, or induction of injury or disease, associated with identified deception, (b) the individual presents self to others as ill, impaired, or injured, (c) the deceptive behavior is evident even in the absence of recognizable external rewards, and (d) it is not better explained by another mental disorder such as psychosis. The specifiers include single episode or recurrent episode.

Factitious disorder imposed on another (previously factitious disorder by proxy) is factitious disorder in which the patient presents another individual (victim) to others as ill, impaired, or injured. The patient, not the victim, receives the diagnosis.

The diagnosis of factitious disorder requires demonstration that the individual is taking surreptitious actions to misrepresent, simulate, or cause the signs or symptoms in the absence of obvious external rewards. In contrast, there is obvious external reward in *malingering*.

Many patients with factitious disorder engage in very painful and potentially lethal self-induction of medical conditions (Vignette 2). They often undergo painful medical procedures and treatments without any apparent gain other than being sick. Many patients seem to be in a trance-like state when they self-induce serious illness. They may develop complications from surgical procedure, scars ("geographic abdomen"), and are at risk of developing drug dependency. For many patients, being a patient with serial hospitalizations may practically become a life-long career. *Sick role addiction* may explain such behavior

Factitious disorder is often seen in individuals with childhood trauma and deprivation and who have few interpersonal relationships. Among patients in general hospitals, about 1 % are considered to have factitious disorder (DSM-5). There are more female (72 % in one study) than male patients, and about half of the female patients were health care workers (Krahn et al. 2003). The patients may have some knowledge of the health care setting either through occupation or in close contact with medical illness (e.g., caring for a chronically ill person). Many are comorbid for other psychiatric conditions including depression, anxiety, substance use, and the borderline personality disorder.

Factitious disorder was known as Munchausen's syndrome in the past. Baron von Munchausen was an eighteenth century German aristocrat who told fantastic and boastful adventure stories. In Munchausen's syndrome, or factitious disorder, patients falsely present or self-induce symptoms and/or signs of a disease and seek medical help, often in the emergency room. They may move from hospital to hospital to receive care.

Factitious disorder imposed on another (*Munchausen's syndrome by proxy*) refers to a condition in which a parent or caretaker deliberately exaggerates or fabricates or induces a physical or psychological-behavioral problems in a child or others. Through this symptom, the parent or caregiver receives attention as well as the victim.

21.7.2 Diagnosis

The diagnosis of factitious disorder is usually made by exclusion of other causes of the symptoms and signs, and/or observation of self-induction/contamination of a medical condition (e.g., infection, ingestion of poison, diuretics or other drugs, etc.) or specimen (e.g., stealing blood from a phlebotomist's cart and pouring it into a bedpan that the patient used).

Laboratory tests may also help in diagnosing factitious disorder (Kenedi et al. 2011; Kinns et al. 2013). For example, in factitious hypoglycemia with insulin abuse, the C-peptide level, which is secreted with endogenous insulin, will not be increased whereas it is increased in insulinoma (Neal and Han 2008).

Once the diagnosis of a factitious disorder is made and the patient has been informed of it, the patient usually leaves the hospital, often against medical advice, only to present again in another hospital.

21.7.3 Management

Management is geared toward prevention of unnecessary and potentially harmful procedures and surgery once the diagnosis has been made. Self-induced illness, however, may be serious and require immediate medical treatment (Vignette 2). Explaining to the patient that the patient may not be fully aware of the psychological factors that contribute to the factitious illness may help develop a collaborative relationship with the physician.

Confrontation with the patient has not been shown to be effective (Krahn et al. 2003; Steel 2009).

Psychotherapy geared to enhancing the patient's coping and interpersonal skills may be helpful, as well as treatment of often coexisting psychiatric conditions, especially anxiety, depression, and borderline personality.

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