

PSYCHOGENIC SEIZURES AND OTHER PSYCHOGENIC SYMPTOMS

S.R. Benbadis

Department of Neurology and Neurosurgery, Comprehensive Epilepsy Program, University of South Florida and Tampa General Hospital, Florida, USA

Introduction

Psychogenic (nonorganic, “functional”) symptoms are an uncomfortable and frustrating challenge, but whether we like it or not, they are common in clinical practice. It is conservatively estimated that at least 10% of all medical services are provided for psychogenic symptoms. Psychogenic symptoms are also common in *neurology*, representing about 9% of inpatient neurology admissions, and probably an even higher percentage of outpatient visits.

Among psychogenic symptoms, psychogenic nonepileptic seizures (PNES) are unique in several ways. They are particularly common and have been extensively studied since the advent of EEG-video monitoring. They are the best studied of all psychogenic symptoms. More importantly, they are unique in that, unlike most other psychogenic symptoms, they can be diagnosed with near certainty.

Psychogenic seizures as the prototype

The misdiagnosis of epilepsy is relatively common. About 30% of patients previously diagnosed with epilepsy and who are not responding to drugs are found to be misdiagnosed, and most are eventually shown to have PNES.

The diagnosis begins with a clinical suspicion, and a number of “red flags” are useful in clinical practice in order to raise the suspicion that “seizures” may be psychogenic rather than epileptic. These include: a high frequency (e.g., daily episodes), unusual triggers, episodes in the doctor’s office, a history of “fibromyalgia” or chronic pain, a florid review of systems, and a suggestive psychosocial history. Certain features of the motor (“convulsive”) phenomena are very useful, and these are best studied with EEG-video monitoring, which is the gold standard for diagnosis. The principle is to record the habitual episode and demonstrate that (A) there is no change in the EEG during the clinical event, and (B) the clinical spell is not consistent with seizure types that can be unaccompanied by EEG changes. This has to be performed by an epileptologist experienced in the procedure. It is based on combined electroclinical analysis, in which both the clinical semiology of the “ictus” and the ictal EEG findings are important. EEG-video monitoring allows the diagnosis of PNES to be made with near certainty.

The diagnosis of psychogenic symptoms

In neurology, common symptoms that are found to be psychogenic include paralysis, mutism, visual disturbances, sensory symptoms, movement disorders, gait or balance problems, and pain. Several signs have been described to help differentiate organic from nonorganic symptoms (e.g., Hoover’s test, “giveaway” weakness, optokinetic nystagmus). More generally, the neurologic examination often tries to elicit symptoms or signs that do not make neuroanatomical sense, e.g., facial numbness affecting the angle of the jaw, gait with or “tightroping.”

Psychogenic symptoms are also common in medicine in general, and every specialty has its share of symptoms that can be psychogenic. A few examples include vomiting, dysphagia, abdominal pain, diarrhea, noncardiac chest pain, shortness of breath, globus and dysphonia, skin excoriations, and blindness. Pain syndromes for which a psychogenic component is likely include tension headaches, chronic back pain, limb pain, rectal pain, and sexual organ pain. In addition, some syndromes are considered to be at least partly (and possibly entirely) psychogenic. These controversial “fashionable” diagnoses include fibromyalgia, myofascial pain, chronic fatigue, Lyme disease, irritable bowel syndrome, and multiple chemical sensitivity.

If 20 to 30% of patients with refractory seizures have psychogenic spells rather than epilepsy, it is likely that the same general number applies to other symptoms (i.e., 20-30% of patients with refractory X have psychogenic X). In fact it is probably even truer for other psychogenic symptoms that are diagnosed only by exclusion. Thus, psychogenic symptoms are almost certainly underdiagnosed. In most circumstances, making the diagnosis of psychogenic symptoms requires an extensive and costly diagnostic workup to exclude even the most rare zebras and unlikely conditions (“defensive medicine”). This results in a large number of tests, procedures, and treatment, increasing cost, and risk of complications. Even when a psychogenic etiology is suspected early on, good medical practice requires exclusion of possible organic causes, and in this situation the physician should probably be quite extensive. The thorny problem is that when all tests are negative and the diagnosis of a psychogenic origin is only one of elimination, the level of certainty is low and a doubt persists (i.e., “are we missing something organic”). Unfortunately, this persisting doubt makes it impossible for treatment to be implemented.

Suggestion & placebos

In some instances, it is helpful to use provocative techniques or “inductions,” and many epilepsy centers use such techniques to aid in the diagnosis of PNES. When these are correctly performed and interpreted, their specificity for the diagnosis of PNES approaches 100%. Inductions have many advantages but are somewhat controversial due to ethical concerns. However, many ethical objections are circumvented by the fact that activations can be performed without the use of placebos.

Psychopathology of psychogenic symptoms

A frequent and unfortunate misconception is that “psychogenic equals fake.” It is important to clarify the differences between the somatoform disorders, in which symptoms are not consciously produced (patients are not faking), and factitious disorder or malingering, in which patients are intentionally faking symptoms. The distinction between malingering and factitious (both are the conscious feigning of symptoms to deceive the physician) is that malingerers have a clear and understandable goal for the behavior (e.g., avoiding jail, obtaining financial compensation), whereas in factitious disorder there is no such goal (they have psychopathology that leads them to assume the sick role for no understandable reason). Although this (DSM) classification is simple in theory, it is nearly impossible to know if a given patient is faking. Most patients with psychogenic symptoms are probably in the unconscious category.

The first step (and perhaps the most important one) in the treatment of psychogenic symptoms is delivery of the diagnosis. Unfortunately, the American Psychiatric Association has abundant written patient education material available on diverse topics, but none on somatoform disorders, a very telling fact.

References

- Benbadis SR. The problem of psychogenic symptoms: is the psychiatric community in denial? *Epilepsy Behav* 2005;6:9-14.
- Benbadis SR. Differential diagnosis of epilepsy. *Continuum Lifelong Learning Neurol* 2007;13(4):48-70 (published by the *American Academy of Neurology*).
- Benbadis SR. Psychogenic non-epileptic seizures. In: Wyllie E (ed). *The treatment of epilepsy: Principles and practice*. 4th edition. Philadelphia: Lippincott, Williams & Wilkins, 2005, pp. 623-630.
- Benbadis SR. Provocative techniques *should* be used for the diagnosis of psychogenic nonepileptic seizures. *Arch Neurol* 2001;58:2063-5.