

Functional disorders continue to pose diagnostic and therapeutic challenges to neurologists

Distúrbios funcionais continuam a representar desafios diagnósticos e terapêuticos para os neurologistas

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Although recognized by physicians since ancient times, functional disorders came to modern neurology scrutiny with Charcot's observations at the Salpêtrière in the late XIXth Century, when these disorders also came to the attention of a young Viennese neurologist, Sigmund Freud. Freud's approach to these disorders were the initial steps that led to the psychoanalytic theories and models¹.

Common presentations of functional disorders include nonepileptic psychogenic seizures, psychogenic movement disorders, psychogenic syncope, psychogenic paralysis, balance disorders, blindness, memory loss, and dissociative states.

Functional disorders are frequently seen in neurology practice. Nonepileptic psychogenic seizures may represent up to 20% of patients with refractory epilepsy referred to an epilepsy monitoring unit, with a reported incidence of 4% of that of epilepsy².

Conversion is the most common diagnosis underlying psychogenic disorders³. Other psychiatric conditions may coexist, such as personality disorders or traits, anxiety and depression⁴. A history of psychological trauma (including sexual trauma, neglect, verbal and physical abuse) has been associated with psychogenic disorders⁵. Compared to people with epilepsy, patients with psychogenic nonepileptic seizures present more severe and disabling seizures, as well as poorer quality of life².

Establishing a correct diagnosis requires skilled history taking, physical and neurologic exam. Coexisting neurologic disease may render the diagnostic process even more challenging, and may deceive even the experienced neurologist. More recently, the use of neurophysiologic monitoring tests has lent further support for the diagnosis of some of these conditions.

Video-EEG monitoring has become a gold standard for the diagnosis of nonepileptic psychogenic seizures. Electrophysiologic analysis of abnormal movements has also become an important diagnostic tool for psychogenic movement disorders. Tilt-table testing also allows the diagnosis of psychogenic syncope.

Suggestion plays an important role in inducing psychogenic symptoms, but the use of provocative maneuvers for diagnostic purposes has been questioned under ethical grounds.

Diagnostic pitfalls for psychogenic disorders are numerous. Epileptic seizures may not be easily distinguished from psychogenic nonepileptic seizures even with video-EEG monitoring, since an electrographic correlate may be lacking in hypermotor or other seizure types. In addition, psychogenic symptoms may emerge in the office and during the diagnostic process, and may not represent patient's habitual symptoms. Symptom embellishment or de novo emergence of psychogenic symptoms in the presence of a physician may mislead the physician to a diagnostic error⁶.

The diagnostic and therapeutic processes of psychogenic disorders involve cooperation between neurologists and psychiatrics. The neurologist is faced with the difficult challenge of diagnosing the functional nature of neurologic symptoms, as well as with ruling out

neurologic disorders, that may occur as comorbidities. The psychiatrist should establish the psychiatric diagnoses and guide treatment.

Disclosing the diagnosis of a psychogenic disorder is a key step in the therapeutic process. Initially, symptoms must be validated. Psychogenic symptoms observed by the neurologist must be recognized as occurring in daily life, and as associated with impaired quality of life.

The importance of adequate diagnostic communication cannot be understated. The diagnostic communication of a psychogenic condition should be performed by an experienced physician, who must be able to create an atmosphere of empathy and support, and should also be able to recognize and deal with psychological mechanisms, such as resistance, that may emerge during diagnosis disclosure. Presenting the diagnosis in the inappropriate setting (such as in the emergency department), or in a hasty and unskilled manner may hinder the success of a therapeutic intervention.

Treatment for psychogenic disorders usually involves psychotherapeutic approaches, but evidence-based of efficacy is scarce. A pilot randomized controlled trial of sertraline versus placebo for nonepileptic psychogenic seizures suggested a beneficial effect of the serotonin-reuptake inhibitor, but the study was underpowered to prove the superiority of sertraline compared to placebo to decrease occurrence of psychogenic seizures⁷. A recent pilot randomized controlled trial showed significant seizure reduction and improved comorbid symptoms and global functioning for psychogenic nonepileptic seizure patients

that underwent cognitive behavioral treatment with or without sertraline, while treatment-as-usual or sertraline-only showed no benefit⁸.

In this issue of *Arquivos de Neuropsiquiatria*, DePaola et al. provide an extensive review of historical aspects, epidemiology, clinical features, diagnosis, and prognosis of psychogenic nonepileptic seizures and psychogenic movement disorders⁹.

The authors also review the limited published data that analyzed possible common features of both disorders. Studies were limited by their retrospective nature or small sample size^{10,11}. A prospective study of demographic, clinical and psychometric questionnaires of psychogenic nonepileptic seizure and psychogenic movement disorders patients disclosed similar psychological profiles with decreased physical and mental health scores and increased somatization, depression and anxiety scores for psychogenic nonepileptic seizures and psychogenic movement disorders. Despite differences in gender, age and clinical presentation, the authors suggested that both conditions may not represent distinct entities¹². These findings should be replicated with different methodologies and in different patient populations, preferably in collaborative studies.

The authors also review recent advances in evidence-based efficacy of cognitive behavioral therapy for psychogenic nonepileptic seizures⁸. These studies should be replicated with different populations, in other cultural settings, and in patients with other types of psychogenic disorders, where evidence-based treatment data are still scarce¹³.

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