

A case of dissociative convulsions presented as frequent epilepsy-like seizures

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ABSTRACT

Dissociative convulsions, a prominent form of dissociative (conversion) disorder formerly known as hysteria, are a common and elusive differential diagnosis from epilepsy. However, the treatment of such patients is always challenging and frustrating due to poor response to the routinely used interventions in most situations. Here, we present a case with dissociative convulsions in order to catch the eye of the clinicians and researchers on the recognition of clinical manifestation and exploration of therapeutic strategies.

INTRODUCTION

Dissociative seizures, often having similar manifestations to that of seizures in the absence of paroxysmal neuronal discharge, pose a significant burden on the patients, their family and the healthcare system.^{1 2} Proper diagnosis is particularly crucial for reducing the burden of this disease. However, diagnosis is often challenging. Because of their close clinical resemblance to epileptic seizures, these patients inevitably wander between neurologists and psychiatrists in different hospitals for definite diagnosis and accurate treatment. Generally, its diagnosis is delayed by an average of 7 years according to current literature. What's worse, the treatment of such patients is always frustrating due to poor response to the routinely used psychotropics, psychotherapy and social intervention in most situations.²⁻⁴ Here, we present a case with dissociative convulsions manifested as frequent epilepsy-like seizures.

CASE REPORT

In this case report, the patient's medical history, records and images were reviewed. Ethics committee approval was not necessary as the case fell within the standard of medical care. The patient understands that her name and initials will not be published and due efforts will be made to conceal her identity, but anonymity cannot be guaranteed. Informed

consent on the clinical information and images were given by the patient.

A 43-year-old married female worker presented with 3 months history of aggravated paroxysmal discomfort and sudden convulsions. The episodes lasted for about 20s per time, and she stated that she could remember the whole process of the episode each time. The frequency of her attacks increased from 2 to 3 times per day, to every 5–10 min, to the point where she could no longer sit up.

During episodic exacerbations, she had consulted different neurologists in different hospitals who had diagnosed her as having dissociative (conversion) disorder and anxiety disorder. She tried multiple medications including escitalopram, mirtazapine, sertraline, paroxetine, olanzapine, risperidone, aripiprazole, lorazepam, madopar, and so forth, as well as the modified electric convulsive therapy (MECT) twice and repetitive transcranial magnetic stimulation (rTMS) once. Video electroencephalogram (EEG) including 24hours EEG, the EEG during seizure and brain MRI are normal. She still tried antiepileptic medications like valproate and madopar for several weeks. However, she had poor response and a fluctuating course in the frequency of attacks. Finally, she was referred to psychiatric services for further treatment.

On our initial evaluation, there occurred repetitive convulsions without any premonitory signs that manifested rigidity and twitching of the limbs with eyes closed tight persisting for 20s. Immediate neurological examination revealed resistant eyelids, no upturned eyeballs and normal light reflection of pupils.

Physiological reflex was normal, while pathological reflex and meningeal irritation were not elicited. There was no muscle atrophy of extremities. Muscle strength was 5/5 in upper and lower extremities, with an increased muscle tone on right side. No other



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abnormalities were noted on neurological examination. She was not found to be having significant anxiety symptoms based on Hamilton anxiety rating scale (HAMA) (score <6). EEG and MR angiography showed no abnormality. A final diagnosis of dissociative convulsions was made according to the criteria of the International Statistical Classification of Diseases and Related Health Problems 10th Revision. The patient was subsequently administered venlafaxine, sulpiride and clonazepam, assisted with supportive and verbal suggestion psychotherapy. During individual therapy sessions, she had revealed a number of stressors including being adopted, going through the death of her father in early childhood and being brought up by her compelling mother. She had two daughters and a strained relationship with her husband after her marriage. Later in the sessions, she gained insight, which helped her become more compliant and able to receive good care at home.

However, she denied any conscious efforts in these episodes. The frequency of conversion seizures was significantly reduced after treatment, and the patient could walk by holding the handrails and self-care partially. But as ever before, her condition would deteriorate once we mentioned that she was expected to be released from hospital. The patient's husband gave up the further treatment and discharged her due to her lack of response towards treatment after 37-day stay.



Figure 1 The patient presented with dissociative convulsions.

DISCUSSION

Dissociative convulsions is closely resembled to epileptic seizures. However, tongue biting, bruising due to falling, urinary incontinence, as well as trance are rare in dissociative convulsions. Importantly, dissociative convulsions differ from epilepsy in many clinical characteristics which are inexplicable by epileptogenic electrophysiological activities, or any other medical disease.⁵ The epidemiological data have showed that the average diagnostic delay from the first dissociative seizure to final diagnosis is 5–10 years, and long-term therapeutic outcomes are very frustrating.⁶ In our case, it seemed that the diagnosis was made promptly. The patient responded well at first; however, the response to treatment did not persist. Particularly, the seizures would recur soon after she returned home or even when she was leaving hospital. Therefore, we tried to further explore possible stressors in her life. Therefore, we could not help suspecting if some possible stressors exist in her life, in that dissociative convulsions are considered to be psychologically mediated.^{7,8} This patient is weak in character and keeps an intense relationship with her family for so long. In addition, the understanding of dissociation is poor among the general population, and thus such patients are often accused of being fake or intentional.⁴ It is conceivable that inadequate support from family may partially result in her long-standing condition. Moreover, the unacceptable situation is that there has not been specific treatment which might have helped until now. Furthermore, the studies exploring the therapeutic strategies for dissociative convulsions are far from desirable. Such patients as our case could be overtreated by a variety of antidepressants, antipsychotics, antiepileptics, etc, even physical treatments (such as MECT or rTMS), which lead to significant financial as well as a physical burden. Recently, Jha and Singh reported that a muscle relaxant eperisone showed immediate, dramatic, complete and sustained response in two patients with treatment-resistant dissociative convulsions,⁹ and this might bring the patient hope.

In summary, dissociative convulsions closely resemble the manifestations of epilepsy in the absence of paroxysmal neuronal discharge. Surprisingly, scientific research on this disorder is very scarce. Therefore, it is strongly suggested that more researches should be dedicated to dissociative convulsions in future, in view of their long diagnostic delays and disappointing rates of treatment response.

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