Case report

Dissociative or Epileptic Seizures: A Diagnostic Dilemma

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Abstract

Dissociative Neurological Symptom Disorder (DNSS) often presents with symptoms mimicking epileptic seizures, termed Dissociative Seizures or Psychogenic Non-Epileptic Seizures (PNES). This case report details a 34-year-old male who experienced jerky movements followed by unconsciousness. He had been treated for epilepsy for the past two years. Admission for his detailed history and examination raised the suspicion of Dissociative Neurological Symptom Disorder in the background of Recurrent Depressive Disorder. He was treated on the lines of Recurrent Depressive Disorder with Dissociative Neurological Symptom Disorder, resulting in notable clinical improvement in his symptoms. This case underscores the need for accurate differentiation between epileptic and dissociative seizures to avoid unnecessary treatments and improve the patient's prognosis. Effective liaison between neurologists and psychiatrists is the key to accurate diagnosis and management of such cases.

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1. Introduction

Dissociative Neurological Symptom Disorder has a wide range of presentations and can lead to involuntary movements and/or loss of consciousness mimicking seizures, generally referred to as Dissociative Seizures or Functional/ Psychogenic Nonepileptic seizures (PNES)[1]. Epilepsy, syncope, and dissociative seizures are the three most common causes of Transient Loss of Consciousness and the misdiagnosis rate between them is around 20% (2-71%); leading to undue investigations, mismanagement, unwanted side effects, diagnostic delay, adverse outcomes, the burden on the healthcare system and overall poor quality of life[2].

Literature shows that 11% of patients presenting in an emergency with seizures, are dissociative but are often misdiagnosed by emergency physicians (88%) and neurologists (38-48%) at first visit[3]. This case is of special interest because of the patient's unique presentation and changing pattern of symptoms. In addition, he had been to multiple psychiatrists and neurologists in the last two years, but he did not improve.

2. Case Presentation

A 34-year-old male, married, a father of three, and a lecturer by profession with an MPhil in Biochemistry, a resident of Rawalpindi was brought to OPD by his father. He presented with jerky movements of the body and loss of consciousness lasting 3 to 4 hours following a stressful telephonic conversation with his father-in-law which left him notably irritable where he collapsed in front of his mother, prompting immediate medical attention. This episode lasted for almost 11 hours and included periods where the patient was able to use the washroom and smoke cigarettes indicating some level of functional awareness during the episode. Upon presentation, the patient was already diagnosed and being treated on the lines of epilepsy with no improvement in his symptoms with antiepileptic medication despite good compliance with the medication. During his stay at the hospital, he exhibited intense, jerky movements of the head, shoulders, and legs, lasting 2-3 minutes followed by a forceful fall and collapsing on the floor. The period of unconsciousness lasted for 2 to 3 hours. These occurred both in bed and while seated, however, no remarkable physical injuries were reported, suggesting a level of control over his actions. The episodes often coincided with morning rounds, pointing to possible environmental triggers. Additionally, discussions about his potential discharge from the hospital consistently triggered an episode, suggesting a psychological benefit from his hospitalization.

The patient's medical history revealed that since October 2022, he had been prescribed antiepileptic medication for similar symptoms. A comprehensive CNS examination conducted during his current hospital stay showed no remarkable findings, and no typical

symptoms of epileptic seizures such as uprolling of eyes, tongue biting, or urinary incontinence were reported. Baseline investigations returned unremarkable results except for a noted low platelet count. A urine test confirmed the absence of substance use.

He reported a persistently low mood, reduced appetite, loss of pleasure in daily activities, and experienced suicidal ideation accompanied by anxiety symptoms, which varied throughout the day. He maintained functionality in self-care and family interactions but his occupational engagement was significantly impaired, leading to frequent work absences.

Exploring his personal history, the patient had achieved all developmental milestones at appropriate ages and described a stressful family environment with strained dynamics with his parents. His pre-morbid personality was marked by emotional instability, impulsivity, and sensitivity to criticism, with few confiding friendships. He had a history of breakup that led to an attempted overdose, underscoring his emotional vulnerability. Currently, his marriage was described as satisfactory, and he had three young daughters.

The patient had a two-year history of opioid use, for which he underwent three months of rehabilitation. He was currently a heavy smoker, consuming one pack of cigarettes per day. He had been under psychiatric care since 2022, initially treated with Sertraline and Mirtazapine, later switching to Venlafaxine and Levetiracetam. However, his compliance with psychotropic medication was reported to be poor and with antiepiletic medication was adequate.

The initial challenge was differentiating epilepsy from Dissociative Neurological Symptom Disorder due to the patient's presentation of jerky movements, risky falls, and periods of unconsciousness. Further exploration of his symptoms confirmed the diagnosis of Dissociative Neurological Symptom Disorder with Recurrent Depressive Disorder, severe, without psychotic symptoms. His treatment regimen included Sertraline, initially at 50mg and increased to 150mg, Olanzapine 5mg, and Alprazolam 0.5 mg for anxiety divided into two doses of 0.25 mg. His initial Hamilton Depression Rating Scale (HAM-D) score was 28, indicative of severe depression.

A detailed psychological work-up was conducted to assess the patient's symptoms, triggers, and underlying stressors. Psychoeducation was provided to explain the nature of Dissociative Neurological Symptom Disorder, differentiating it from epilepsy, and emphasizing the role of stress and emotional triggers. This helped the patient gain insight into his condition, reducing fear and confusion, and motivating him to actively engage in his treatment plan. Reassurance was provided to make him comfortable and relaxation techniques, and coping strategies were introduced to address acute stress and dissociative episodes. By the fifth day, there was a notable improvement in his mood, and his HAM-D score decreased significantly. After an eight-day hospital stay, he was discharged with a comprehensive follow-up plan that included continuing the prescribed medication and regular psychological sessions. Two weeks post-discharge, he returned for a follow-up and reported significant improvement in his overall condition. Despite experiencing 2-3 shorter episodes of dissociative fits during this period, he remained optimistic about his recovery progress.

3. Discussion

The exact etiology of Dissociative fits is unknown, but several risk factors have been identified. Among these are emotional neglect in childhood, parental conflicts, unstable relationships, attachment issues, stressful life events, depression, anxiety, personality traits especially borderline including emotional instability, impulsivity, sensitivity to criticism, and poor stress coping, all of which were present in this patient and would explain the development of dissociative fits in him[1].

It is crucial to differentiate between true epilepsy and dissociative fits, as being labeled and treated for epilepsy can have disastrous physical, mental, and social implications such as stigmatization, serious side effects of antiepileptic medications, depression, and suicidal ideation.[4] Stigmatization alone is a major concern for patients in Pakistan and involves fear of being marginalized, and discriminated against, in terms of education, employment and marriage, contributing to not only depression and anxiety but also poor quality of life and their delay in seeking treatment[5]. Similarly, in our case report, the stigmatization faced by our patient and his lack of awareness could be the possible reasons

to delay in seeking proper psychiatric consultations for this matter.

Another thing to be kept in mind is that generally the organic diseases and their outcomes are deemed more grievous but the harms of missing/misdiagnosing a functional disorder ought not be undermined by unneeded investigations, treatment, their psychological and economic burdens[6]. This was also the case in our study, where the main focus of investigation and management was Epilepsy, an organic disorder.

However, early diagnosis of dissociative seizures is critical and is the most important prognostic factor, as prolonged dissociations are difficult to break and are linked with negative outcomes[7]. Still, differentiating between dissociative seizures and epilepsy poses a great challenge due to various types and manifestations of epilepsy, and because the two diseases can coexist in up to 54% of cases[8]. Diagnosis is mainly clinical. Electroencephalography (EEG) can assist but cannot confirm the diagnosis. Therefore, it lies upon the physician to explore the characteristics of seizure episodes, history of stressor, psychiatric illness and associated risk factors to reach an accurate diagnosis[9, 10]. The average delay in its diagnosis is 7.2 years which is in contrast to our study, where the diagnosis was made within 2 years saving the patient from a long list of afore-mentioned ill effects. However, this study was conducted in 2003 and unfortunately, no recent data is available for more apt comparison[11].

Antiepileptic medications are ineffective except in case of coexisting epilepsy; thus, treatment is mainly psychological and involves Cognitive Behavioral Therapy, group therapy, addressing underlying problems and stressors, patient education, family education and optimization of other comorbids[5, 6]. Our patient was taking Levetiracetam for the last two years which was tapered off. Anxiolytics and antidepressants were added to address his mood and anxiety symptoms. Simultaneously, he was initiated on psychotherapy to which he showed an optimistic response. This favors the diagnosis of Dissociative fits rather than epileptic fits or coexistence of the two.

4. Conclusion

Dissociative and Epileptic fits can have a very similar presentation and distinguishing between them can be a tedious task. However, early diagnosis and correct management are imperative for safeguarding the patient's physical, mental, and social health. This calls for a collaborative effort by Neurologists and Psychiatrists for the provision of optimum patient care and to improve disease outcomes as much as possible.

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