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Dissociative Convulsions Mimicking Epileptic Seizures: A Diagnostic Challenge in a Patient with Complex Psychosocial Stressors

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Abstract
Dissociative convulsions are paroxysmal events resembling epileptic seizures yet occurring without ictal epileptiform activity, and they are frequently misdiagnosed or delayed, especially in resource-limited settings. This study aims to describe the diagnostic process, clinical course, and psychosocial context of dissociative convulsions in a 29-year-old woman with complex psychosocial stressors, and to illustrate a structured management approach. The research adopted a qualitative case study design, employing a descriptive-analytic paradigm and inductive analysis. Data were collected from a single case meeting the criteria for dissociative convulsions (F44.5), evaluated in a psychiatric outpatient setting, through comprehensive clinical interviews, mental status examination, behavioral observations, and documentation of semiotic seizure features, alongside routine EEG, CT head, and laboratory tests. Data were analyzed thematically by identifying patterns of semiotics, psychosocial triggers, and treatment response. The result shows that seizure-like episodes emerged in close temporal relation to interpersonal conflict and reproductive losses, were accompanied by prominent autonomic symptoms, and occurred against a background of adverse childhood experiences and borderline-type personality traits. The conclusion highlights that a careful semiotic assessment, normal ancillary investigations, and thorough psychosocial evaluation support the diagnosis of dissociative convulsions, even without video-EEG monitoring, and that a multimodal biopsychosocial strategy combining psychoeducation, cognitive-behavioral therapy, grounding techniques, and pharmacotherapy effectively reduces seizure frequency and psychosocial impairment.

Keywords: *Dissociative Convulsions, Functional Seizures, Psychogenic Non Epileptic Seizures, Psychosocial Stressors, Seizure Mimicry*

Abstrak
Gangguan disosiatif konvulsi merupakan kejadian paroksismal yang menyerupai serangan epileptik namun terjadi tanpa aktivitas epileptiform ictal, dan sering kali mengalami diagnosis terlambat atau keliru, terutama di lingkungan pelayanan terbatas. Penelitian ini bertujuan untuk menggambarkan proses diagnosis, perjalanan klinis, serta konteks psikososial disosiatif konvulsi pada seorang perempuan usia 29 tahun dengan beban psikososial kompleks, sekaligus menunjukkan pendekatan penatalaksanaan yang terstruktur. Penelitian menggunakan rancangan studi kasus kualitatif dengan paradigma deskriptif-analitik dan analisis induktif. Data berasal dari satu kasus klinis yang memenuhi kriteria kejang disosiatif (F44.5), dinilai di klinik psikiatri rawat jalan, melalui wawancara klinis menyeluruh, pemeriksaan status mental, observasi perilaku, dan dokumentasi semiologi serangan, serta hasil EEG, CT kepala, dan laboratorium rutin. Data dianalisis secara tematik dengan mengidentifikasi pola semiologi, pemicu psikososial, dan respon terhadap terapi. Hasil menunjukkan bahwa episode kejang-like muncul sangat berdekatan dengan konflik interpersonal dan keguguran berulang, disertai gejala otonom yang menonjol, serta berlangsung pada latar belakang pengalaman masa kanak-kanak bermasalah dan ciri kepribadian borderline-like. Kesimpulannya adalah bahwa penilaian semiologi yang cermat, pemeriksaan penunjang normal, serta penilaian psikososial menyeluruh dapat mendukung diagnosis kejang disosiatif meskipun tanpa video-EEG, dan bahwa pendekatan biopsikososial multimodal yang mengintegrasikan psikoedukasi, terapi kognitif-perilaku, teknik grounding, serta farmakoterapi efektif dalam menurunkan frekuensi serangan dan gangguan psikososial.

Kata Kunci: Disosiatif Konvulsi, Kejang Fungsional, Kejang Non Epileptik Psikogenik, Stresor Psikososial, Penyamaran Kejang

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INTRODUCTION

Dissociative convulsions, classified under code F44.5 within the dissociative (conversion) disorders of the ICD-10, are paroxysmal events that imitate the clinical appearance of epileptic seizures but unfold in the absence of any ictal epileptiform activity (Asadi-Pooya, 2017; Popkirov et al., 2019). In current English-language psychiatric and neurological literature the same condition is most often labelled psychogenic non-epileptic seizures (PNES), functional seizures, or simply dissociative seizures, reflecting the long-running terminological debate between psychiatry and neurology (Asadi-Pooya, 2017; Kanemoto et al., 2017). Roughly one in five to one in three patients evaluated at tertiary epilepsy centres for refractory seizures eventually receive this diagnosis, and population-based estimates suggest an annual incidence of around three new cases per one hundred thousand individuals (Asadi-Pooya, 2017; Villagran et al., 2021). Women between adolescence and the fourth decade of life are disproportionately affected, which makes dissociative convulsions a clinically relevant entity in everyday psychiatric practice (Goldstein et al., 2019; Popkirov et al., 2019).

From an aetiological standpoint, dissociative convulsions are best conceptualised within a biopsychosocial framework rather than as a single-cause disease. Contemporary neuroimaging and neurophysiological work indicates that these events emerge from disordered connectivity among limbic, prefrontal, and sensorimotor networks, with hyperactivity in regions devoted to emotion processing and weakened top-down control over motor output (Pick et al., 2019; Voon et al., 2016). Such circuit-level findings dovetail with strong clinical evidence that adverse childhood experiences, intimate-partner conflict, sexual or physical abuse, repeated pregnancy losses, and other accumulating life stressors substantially increase the risk of developing the disorder (Asadi-Pooya, 2017; Ludwig et al., 2018; Tabib et al., 2024). Psychiatric comorbidities are the rule rather than the exception, with depressive, anxiety, post-traumatic, and personality disorders, particularly those falling within the borderline pattern, frequently identified in this population (Brown and Reuber, 2016; Diprose et al., 2016; Gargiulo et al., 2022).

Despite the considerable advances mentioned above, diagnostic delay remains a defining problem of clinical care: in many series the interval between symptom onset and accurate diagnosis stretches over several years, during which patients are exposed to unnecessary antiseizure drugs, repeated emergency visits, and substantial iatrogenic harm (Abi-Nahed et al., 2024; Asadi-Pooya, 2017). Early and empathetic communication of the diagnosis, followed by a structured plan that combines pharmacotherapy for psychiatric comorbidities with psychoeducation, cognitive–behavioural therapy, and grounding-based self-management, has been associated with substantial improvements in seizure frequency, healthcare utilisation, and quality of life (Goldstein et al., 2020; Tolchin et al., 2019). The present report describes a young woman with dissociative convulsions arising against a backdrop of chronic interpersonal and reproductive losses, and discusses the diagnostic reasoning and management considerations that this clinical scenario raises in a resource-limited Indonesian psychiatric setting.

METHOD

The research design employed was a qualitative case study adopting a descriptive paradigm, using inductive analysis to gain an understanding of the clinical mechanisms and psychosocial contexts underlying dissociative seizures in patients (Creswell, 2021; Sugiyono, 2022). The case study method allows researchers to explore the semiotic patterns of attacks, the reciprocal relationships between biological, psychological, and social factors, as well as the impact of multidisciplinary interventions in depth within a specific clinical context (Gargiulo et al., 2022). This qualitative approach is also consistent with clinical research ethics in Indonesia, which emphasize the importance of understanding cultural and family contexts in comprehending somatoform and dissociative disorders (Sudaryono, 2023; Emzir, 2022).

The study population consists of adult patients presenting with seizure-like or dissociative seizure complaints evaluated in the psychiatric services of a teaching hospital in Indonesia, specifically within the context of limited secondary care settings in a district (Carozzino et al., 2025; Aybek & Perez, 2022). The study sample consists of a single clinical case of a 29-year-old woman who met the diagnostic criteria for dissociative seizures (F44.5) with seizure-like episodes not accompanied by epileptiform waves on EEG, and who had a complex psychosocial background including marital conflict, recurrent miscarriages, and family burdens. The sample was selected based on the principle of case significance rather than statistical representativeness; thus, these cases were chosen because they

possess distinctive characteristics relevant to illustrating the challenges of diagnosing and managing dissociative convulsions in an Indonesian setting (Sudaryono, 2023; Creswell, 2021).

RESULT

Case Presentation

A 29-year-old married woman presented to the Psychiatry Outpatient Clinic of RS Muhammadiyah Lamongan with episodes of sudden loss of consciousness accompanied by convulsions. The episodes tended to emerge after intense marital conflict, most recently following her husband's disclosure of an extramarital affair. The complaints were intermittent and were preceded or accompanied by symptoms of anxiety, including palpitations, profuse sweating, tremor, and a sensation of nearly falling whenever she found herself in crowded places. Her husband reported that she frequently appeared abruptly restless and had experienced convulsive episodes of which she was unaware. The symptoms had been present for approximately five years and had become more disabling in 2023, prompting referral to the Neurology Clinic. Electroencephalography and head computed tomography performed at that time were both reported as normal. The patient attended outpatient neurology follow-up for about one year but discontinued treatment on her own initiative because she perceived no meaningful improvement. Two weeks prior to the index psychiatric consultation, another convulsive episode occurred after a severe argument with her husband and required Emergency Department attention.

Her psychosocial history revealed considerable chronic stress. She had divorced her first husband against a background of economic hardship, absence of financial support, persistent conflict with her mother-in-law, and being driven out of her in-laws' home when her first child was only seven months old. Verbal disputes with siblings were frequent and she felt insufficiently supported by her family of origin. During the first marriage she suffered one miscarriage. She remarried in 2021 and subsequently faced a sequence of severe stressors, including her mother's stroke, her child's urolithiasis, and two consecutive miscarriages within the second marriage. The household climate deteriorated further after she became aware of her husband's infidelity, which appeared to function as the principal precipitant of the recent seizure-like recurrences.

The patient was the youngest of four siblings. Her childhood and adolescence were marked by withdrawal from peers and repeated episodes of running away from home. She completed vocational secondary school with a history of frequent truancy. She had worked as a minimarket cashier while still in school, and at the time of presentation she earned a living through small-scale trading. Social activities outside the home were limited; she preferred to remain indoors because of discomfort in social environments. Heteroanamnesis from her current husband added that, from the beginning of their marriage, she had been prone to sudden episodes of anxiety, suspiciousness, emotional lability, and a tendency to magnify ordinary problems. He acknowledged his own infidelity while recognising that his wife was simultaneously coping with multiple psychosocial pressures.

Psychiatric examination revealed a fully alert patient with intact orientation. Her mood was anxious, with a labile but congruent affect. Thought processes were coherent and reality-based, with no delusions or hallucinations. Cognitive function was preserved and insight was rated at level 6, indicating adequate awareness of her illness and willingness to engage in treatment. Ancillary investigations, namely electroencephalography, head computed tomography, and routine laboratory tests, did not disclose any organic abnormality that could account for the seizure-like attacks. Based on the comprehensive clinical evaluation, dissociative convulsions (F44.5) were diagnosed on Axis I, with generalised anxiety disorder (F41.1) considered as a differential. Emotionally unstable personality disorder, borderline type (F60.31), was raised as a possible Axis II diagnosis. There was no clinically significant general medical condition on Axis III. Stressors affecting the primary support group dominated Axis IV, and the global assessment of functioning score was estimated within the 61–70 range, signalling mild but persistent functional impairment. Management combined pharmacotherapy, comprising trifluoperazine, alprazolam, lorazepam, diazepam, and amitriptyline, with psychoeducation, psychosocial therapy, cognitive–behavioural therapy, grounding techniques, and a structured plan for regular follow-up at the Psychiatry Clinic. A chronological summary of the patient's clinical course and key psychosocial stressors is shown in Figure 1.

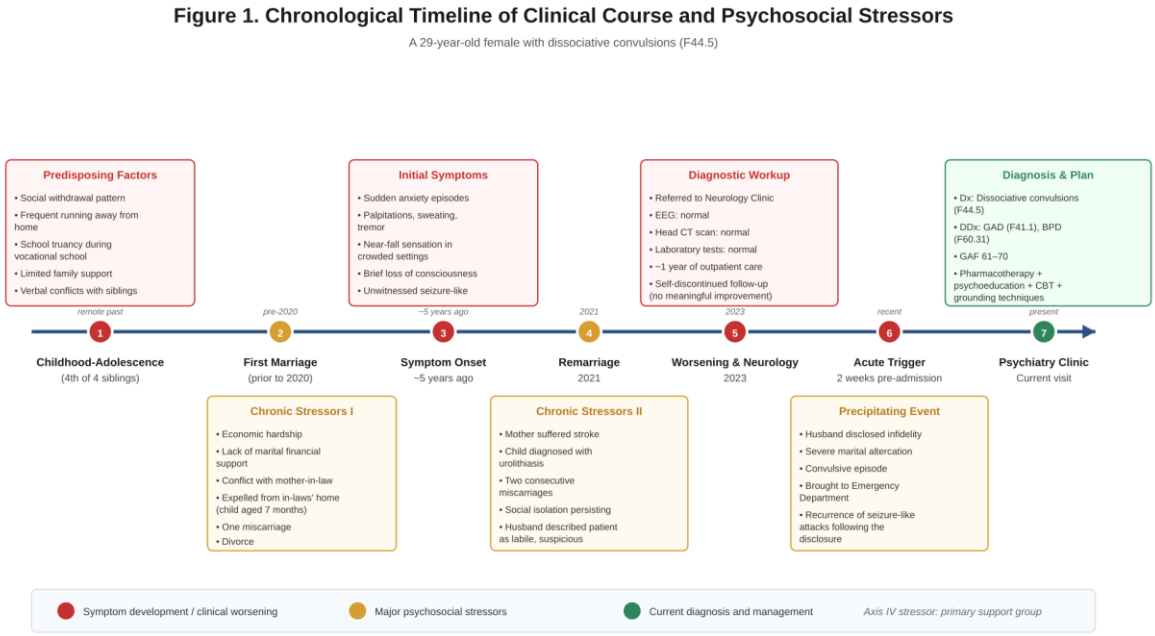

Figure 1. Chronological timeline of the patient's clinical course, integrating early predisposing features, accumulating psychosocial stressors, neurological workup, and current psychiatric management.

DISCUSSION

The clinical picture in this patient illustrates a textbook example of dissociative convulsions in a young adult woman with a long, complex history of interpersonal and reproductive adversity. Several features of the episodes, including their close temporal relationship to acute emotional conflict, the prominent autonomic prodrome, and the absence of post-ictal confusion or focal neurological deficits, are typical of dissociative seizures rather than of epileptic events (Asadi-Pooya, 2017; Anis et al., 2022). Equally important, the structural and electrophysiological workup, with normal head computed tomography, normal electroencephalography, and unremarkable laboratory results, ruled out a primary epileptic cause, supporting the psychiatric formulation (Gilmour et al., 2021; Kanemoto et al., 2017). In settings where prolonged video-electroencephalographic monitoring is not feasible, as is the case in many Indonesian district hospitals, the diagnosis necessarily relies on a combination of careful seizure semiology, witness accounts, and normal interictal recordings, an approach explicitly endorsed by the International League Against Epilepsy task force (Kerr et al., 2017; Kanemoto et al., 2017).

The constellation of stressors described here aligns closely with what the literature identifies as the most frequent psychosocial substrate of dissociative convulsions. Adverse childhood experiences, including emotional neglect, family conflict, and patterns of running away from home, have been recognised as powerful predisposing factors that shape later vulnerability to functional neurological symptoms (Diprose et al., 2016; Hingray et al., 2022; Ludwig et al., 2018). In adulthood, marital discord, partner infidelity, repeated miscarriages, and care-giving demands have likewise been associated with the onset and exacerbation of seizure-like attacks (Asadi-Pooya, 2017; Tabib et al., 2024). The integrative cognitive model proposed by Brown and Reuber (2016) describes how accumulated traumatic and stressful experiences contribute to the formation of a maladaptive seizure scaffold that can be triggered automatically by interoceptive or environmental cues, even without conscious intent. The disclosure of marital infidelity in the present case functioned as such a triggering cue, reactivating earlier patterns of overwhelm and loss of control.

Intimate-partner violence and chronic relational adversity warrant particular emphasis because they are over-represented among women with dissociative seizures. Global epidemiological data suggest that nearly one in three women experiences some form of intimate-partner violence during their lifetime, and women with pre-existing mental health difficulties are disproportionately affected (Jeyagurunathan et al., 2025; White et al., 2024). Psychological violence alone, even in the absence of physical aggression, has been shown to substantially raise the risk of common mental disorders, including anxiety and somatoform presentations (Lucena et al., 2017; Tabib et al., 2024). For the present patient,

repeated humiliation and the recent disclosure of infidelity by a partner on whom she was emotionally and economically dependent likely operated as both a chronic stressor and an acute precipitant. This dynamic also helps to explain her perception of insufficient family support, given that she described long-standing verbal conflicts with siblings and limited refuge within her family of origin.

A further diagnostic consideration concerns the overlap between dissociative convulsions, generalised anxiety disorder, and emotionally unstable personality disorder of the borderline type, all of which were raised in this patient. Comorbid anxiety, depression, post-traumatic stress, and personality disorders are documented in a majority of patients with functional seizures, with cluster B traits being particularly common (Brown and Reuber, 2016; Gasparini et al., 2024; Gargiulo et al., 2022). Emotion dysregulation, identity disturbance, fear of abandonment, and impulsivity, all features that may operate in the borderline spectrum, share neurobiological substrates with dissociative seizures, including amygdala hyperreactivity and reduced prefrontal modulation of affective responses (Pick et al., 2019; Voon et al., 2016). The patient's long-standing labile mood, suspiciousness, tendency to magnify problems, and pattern of social withdrawal raise the possibility of underlying personality vulnerability, although a definitive Axis II diagnosis requires longitudinal assessment beyond a single consultation. Clinically, this overlap is important because it shapes both prognosis and treatment selection (Gasparini et al., 2024).

Communication of the diagnosis is arguably the single most influential intervention in dissociative convulsions and warrants careful planning. A non-judgemental explanation that validates the reality of the episodes, clarifies their non-epileptic nature, and links them to the patient's life context has been shown in cohort studies to reduce seizure frequency and emergency-department attendance, sometimes within weeks (Abi-Nahed et al., 2024; Tolchin et al., 2019). In the present case, the structured plan combined this explanatory step with cognitive–behavioural therapy, grounding strategies, and pharmacotherapy targeting comorbid anxiety. Although the CODES randomised controlled trial did not demonstrate superiority of dissociative-seizure-specific cognitive–behavioural therapy over standardised medical care in terms of monthly seizure counts, it did show clinically meaningful gains in secondary outcomes such as quality of life, mood, and self-rated improvement (Goldstein et al., 2020). Adjunctive techniques, including mindfulness-based interventions and brief online psychotherapy incorporating grounding and verbalisation, have also shown preliminary benefit in reducing seizure frequency and psychiatric symptom burden (Carozzino et al., 2025; Sharma et al., 2022).

Pharmacological treatment of dissociative convulsions remains supportive and targets the comorbid psychiatric syndromes rather than the seizures themselves, since antiepileptic drugs offer no benefit when no epileptiform activity is present (Asadi-Pooya, 2017; Peeling and Muzio, 2024). Selective serotonin reuptake inhibitors and tricyclic antidepressants such as amitriptyline are commonly prescribed for the depressive and anxious symptoms that frequently accompany the disorder, while short courses of benzodiazepines, including alprazolam, lorazepam, or diazepam, may help to contain acute anxiety, panic-like surges, and sleep disturbance, with careful attention to the risk of dependence (Peeling and Muzio, 2024; Villagran et al., 2021). Low-dose antipsychotics such as trifluoperazine are occasionally used to address agitation or affective lability, particularly when emotionally unstable traits coexist, although evidence specifically supporting this practice in dissociative convulsions remains limited (Aybek and Perez, 2022). Long-term prognosis depends on duration of illness before diagnosis, acceptance of the psychiatric formulation, treatment adherence, and the persistence of social adversity; favourable outcomes have been reported when accurate diagnosis is followed by sustained multidisciplinary care, while continued exposure to abusive relationships and prolonged misdiagnosis worsen prognosis (Abi-Nahed et al., 2024; Diprose et al., 2016; Villagran et al., 2021). For this patient, addressing the marital dynamics, strengthening family support, and ensuring regular psychiatric follow-up will probably matter as much as the prescribed medication.

CONCLUSION

This case underscores how dissociative convulsions can convincingly mimic epileptic seizures in a young woman whose history is dominated by interpersonal conflict, repeated reproductive loss, and limited family support, and it demonstrates that an accurate diagnosis can be reached even without video-electroencephalographic monitoring when a careful semiological evaluation is combined with normal ancillary investigations and a thorough psychosocial assessment. Recognising the disorder

early, communicating it with empathy, and delivering a multimodal plan that integrates pharmacotherapy for comorbid anxiety and affective symptoms with psychoeducation, cognitive–behavioural therapy, and grounding techniques offers the best chance of reducing seizure burden, preventing iatrogenic harm from unnecessary antiseizure medication, and restoring psychosocial functioning. For clinicians working in settings where advanced neurophysiological tools are scarce, dissociative convulsions should be considered whenever recurrent seizure-like episodes occur in close temporal proximity to emotional stressors and are accompanied by unremarkable neurological workup.

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