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Monoparesis as a Conversion Disorder in Borderline Personality Disorder

Nnenna Bessie Emejuru[1*], Ogochukwu Agazie[2], Gideon Onyebuchi Idoko[3], Samuel Alao[4], Cheikh S. Galledou[5], Saliu Ajedotun Shittu [6], Vivian Obitulata-Ugwu[7], Sybille Defeugaing[8], Suraiya Roy[9], Olasumbo E. Fagbenle[10], Joy Ugwuanyi[11], Kelechi Adannaya Iwuji[12], Chinwe Okeke-Moffatt[13], Gyullu Nifatlieva[14], Afolarin Ishola[15], Ted Olivier Montes[16], Chinenye Loveth Aleke[17], Ndukaku Ogbonna[18], Evaristus Chino Ezema[19], Francis Ojochemin Oyih[20]

[1]Department of Medicine, College of Medicine, Imo State University, Orlu, Nigeria
[2]Department of Medicine, College of Medicine, University of Lagos, Lagos, Nigeria
[3]School of Graduate Studies, Fanshawe College, Ontario, Canada
[4]Department of Clinical Services, PY Medical Group, Flushing, USA
[5]Department of Medicine, St. Christopher Iba Mar Diop College of Medicine, Dakar, Senegal
[6]Department of Clin Services, La Providence Peds &amp, Family Clinics &amp, Oasis Kidney Ctr, Houston, USA
[7]Department of Public Health, Texila-American University, Georgetown, Guyana
[8]Department of Medicine, American University of the Caribbean, Sint Maarten, Kingdom of the Netherlands
[9]Department of Medicine, IAU College of Medicine, Vieux Fort, Saint Lucia
[10]Department of Clinical Services, Ascension Seton Cedar Park, Texas, USA
[11]Department of Internal Medicine, University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu, Nigeria
[12]Department of Medicine, University of Belgrade, Belgrade, Serbia
[13]Department of Medicine, Washington University of Health & Sc, San Pedro, Belize
[14]Department of Medicine, Donetsk National Medical University, Kropyvnytskyi, Ukraine
[15]Department of Clinical Services, ECU Health Medical Ctr, Greenville, USA
[16]Department of Medicine, Université Notre Dame d'Haiti, Port-au-Prince, Haiti
[17]Department of Physiotherapy, Federal Medical Center, Makurdi, Benue State, Nigeria
[18]Department of Clinical Services, Dumont Center for Rehab and Nursing Care, New Rochelle, USA
[19]Department of Behavioral Health, One Brooklyn Health, Brooklyn, USA
[20]Department of Medicine, University of Benin, Benin, Nigeria
Email: *njemanzenina@yahoo.com

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Abstract

Background: Borderline Personality Disorder (BPD) is a complex psychiatric disorder marked by unstable relationships, mood lability, and a shattered self-image, presenting with comorbid conditions across a variety of clinical contexts. The diverse nature of its symptoms manifests across a broad spectrum, including atypical neurological manifestations in the form of a conversion disorder as transient monoparesis. **Case Presentation:** We report a case of a 21-year-old African American with posttraumatic stress disorder, and alcohol and cannabis use disorders. She presented voluntarily with a sudden onset of

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weakness in the left lower extremity following a dispute with her boyfriend. Psychiatric evaluation identified the classic BPD features: self-injury, impulsiveness, unstable relationships, and mood instability. Neurological system examination was significant for 3/5 muscle strength of the left lower extremity. Laboratory investigations, CT scan of the head, and lumbar spine were normal. However, urine toxicology tested positive for cannabinoids. A follow-up re-evaluation of left lower extremity muscle strength showed a power of 5; the patient was able to ambulate with no restrictions. **Discussion:** This patient presents features consistent with the diagnostic criteria of BPD, including impulsive actions, self-harm, and disputes with her boyfriend. This case highlights the unusual neurological manifestation of BPD featuring transient monoparesis. The literature documents neurological symptoms in BPD, but monoparesis remains an infrequent manifestation. The finding of a lack of a physiological cause and the patient's swift recovery highlight a conversion disorder, an atypical presentation of BPD. These atypical symptoms reinforce the diagnostic complexity of BPD and the need for a holistic evaluation of BPD patients. **Conclusion:** Healthcare professionals should recognize that BPD may present with rare neurological symptoms. Though a conversion disorder in feature, a complete neurological examination should accompany the initial clinical examination.

Keywords

Borderline, Disorder, Monoparesis, Presenting

1. Background

The Diagnostic and Statistical Manual of Mental Disorders (DSM)-Five Text Revision (Tr) describes Borderline Personality Disorder (BPD) as a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity, emerging by early adulthood and present in a variety of contexts, as indicated by five or more of a set of nine criteria [1]. These nine criteria include: frantic efforts to avoid real or imagined abandonment, unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation, markedly and persistently unstable self-image or sense of self, and impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating) [1]. Others include recurrent suicidal behavior, gestures or threats, or self-mutilating behavior, affective instability due to a marked reactivity of mood such as intense episodic dysphoria, irritability or anxiety usually lasting a few hours, chronic feelings of emptiness, inappropriate, intense anger or difficulty in controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights), and transient, stress-related paranoid ideation or severe dissociative symptoms [1].

The definition and clinical characterization of BPD have been evolving since the introduction of the words by Kernberg [2]. In the 80s, building upon Kern-

berg's concept, problems of identity and interpersonal relationships characterized by sudden shifts from one extreme to another were added [3]. Research continues to be carried out on the etiology of BPD, epidemiology, course, and prognosis [4]. The relevance of pharmacotherapies and psychotherapies in its management is equally receiving further research input [5].

BPD is a challenging disorder from both clinical and research standpoints. There is still debate about its conceptualization as either a specific personality disorder or a level of impairment in personality functioning [6]. Even the treatment has been challenging as well. Literature has not shown consistent evidence of a particular psychotropic medication that is efficacious for the symptoms of the disorder [7]. Hence, regulatory agencies are yet to approve a single medication for the treatment of BPD [8].

The diverse clinical presentations of BPD often share features with other psychiatric disorders [9]. Patients with BPD frequently have several comorbid mental disorders due to their extensive psychiatric symptomatology [10]. The heterogeneous nature of its symptoms, which manifest across a broad spectrum, has made clinical diagnosis more daunting [9]. Recently, there has been increasing advocacy for shifting from the traditional Diagnostic and Statistical Manual of Mental Disorders-based categorical diagnosis to a more dimensional approach encompassing varied presentations of BPD patients [11]. Therefore, we present a case of BPD in a young female adult who presented with monoparesis. This study aims to contribute to the understanding of the nuanced symptomatology of BPD and provide further insights that may inform future research.

2. Case Presentation

The patient is a 21-year-old African-American female with a past psychiatric history of post-traumatic stress disorder (PTSD), alcohol, and cannabis use disorders. She has no other significant medical history, prior hospitalizations, or prior diagnosis of BPD. She came voluntarily to the hospital, accompanied by her mother, due to a sudden onset of weakness in her left lower extremity five hours prior to presentation. The patient and her mother reported that the patient was reasonably well until a quarrel with her boyfriend the day prior to presentation. The patient further reports occasional self-injurious behavior by cutting herself after a quarrel with an estranged boyfriend in the past. Further history reports occasional aggressive behaviors under slight provocation. The patient described her behavior as stemming from "short temper". She states that her relationship with her boyfriend has been stressful, and she drinks alcohol and smokes cannabis to calm herself down. She reports a childhood trauma, which she did not want to elaborate on. She endorsed partial compliance with her follow-up appointment with her outpatient psychiatrist.

The patient denies any history of trauma, recent upper respiratory infection, or self-limiting diarrhea. On physical examination, the patient's vital signs were within normal limits. Neurological system examination was remarkable for power

of 3 at the left lower extremity; tones, reflexes, and sensation were globally intact. Laboratory investigations revealed a complete blood count (CBC) with differentials and a metabolic panel within reference ranges. A urine toxicology screen was positive for cannabinoids, and the blood ethanol level was negative. Imaging studies, including Magnetic Resonance Imaging (MRI) of the head and lumbar spine, showed no abnormalities as seen in Figure 1 and Figure 2.

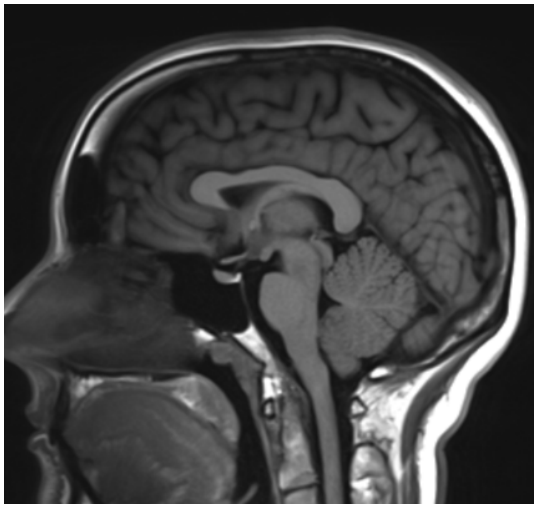

Figure 1. MRI head.

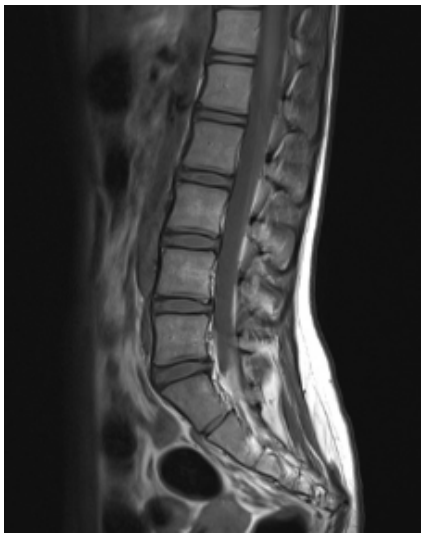

Figure 2. MRI lumbar spine.

Mental status examination revealed a young black woman, who appeared her stated age, fairly groomed, cooperative, with fair eye contact. No psychomotor agitation or retardation was observed. Her speech was spontaneous and fluent. She described her mood as sad in view of her relationship with her boyfriend. Her affect was congruent with the mood. The thought process was logical. Her thought content was devoid of suicidal or homicidal ideation. No delusion or perceptual disturbance was elicited. The patient was oriented to person, place, time, and sit-

uation. Her insight into her mental illness was fair. Her judgment of the treatment plan was limited, as she continued to request discharge before the completion of the clinical trajectory. A diagnosis of Borderline Personality Disorder with monoparesis was made, and conversion disorder was to be ruled out. The patient was to be managed symptomatically.

The follow-up neurological re-evaluation within 24 hours revealed power of 5 in the left lower extremity and other limbs. The patient ambulated with no limitation or support, and gait was normal. The patient was discharged in stable condition after further observation for 24 hours. She is scheduled for follow-up at the neurology and psychiatric clinics.

3. Discussion

The patient has no history of prior psychiatric hospitalization. She is intermittently compliant with her outpatient psychiatric follow-up appointments. It is noted from the history that the patient has instability in interpersonal relationships. She appeared to be acting out on the prospect of abandonment while in romantic relationships. Impulsive actions culminate in both alcohol and cannabis use, along with other aggressive behaviors. The deliberate self-harm by cutting the wrists follows arguments and quarrels with boyfriends. These features are in keeping with the diagnostic criteria of BPD. Patients with BPD frequently attempt suicide and engage in self-harming activities; an earlier study found that 90% of adult and adolescent BPD patients self-mutilate [12].

Patients with BPD often exhibit traditional psychiatric features, including suicide or self-harming behavior, abuse by intimate partners, and multiple psychiatric diagnoses [13]. However, these patients can present with multiple somatic complaints, medically characterized as somatic preoccupation at one end and pure somatization disorder at the other end [14]. A chronic dissociative hemiparesis in a patient with BPD was reported as an atypical presentation [15]. This is similar to the index case in which the patient presented with monoparesis after a quarrel with her boyfriend, with complete resolution of the monoparesis after 21 hours. There was no prior trauma that could have accounted for the presentation. There was no history of prodromal symptoms of upper respiratory infection or self-limiting diarrhea heralding Guillain-Barré Syndrome. Viral screening, including viral screening for Epstein-Barr Virus, Herpes Simplex Virus, and Enterovirus, was negative. These viruses have been implicated with monoparesis in the past. In 2023, a case of factitious disorder and Borderline Personality Disorder was documented [16]. The neurological examination in the index case revealed a power of 3 in the left lower extremity, thereby clarifying the less likelihood of factitious disorder. In describing left-sided hemiparesis in a patient with BPD, the author in a publication described CT imaging of the head, which showed a cleft by gray matter extending from the margin of the right posterior frontal lobe to the margin of the lateral ventricle, consistent with schizencephaly [17]. Other researchers argued that patients with diagnoses of BPD presenting with neurological

soft signs correlate with severity in BPD [18].

The neurological presentation is a potential contributor to the long-term adverse outcome in the clinical trajectory of these patients, culminating in functional disability [19]. Although there was no specific long-standing focal neurological deficit identified as part of the symptomatology of patients with BPD, there was an increased observation of mild neurological soft signs in patients with BPD [18].

It is, therefore, imperative that in the management of patients with BPD, clinicians evaluate for atypical presentations. These presentations could be features of other psychiatric comorbidities, like the index patient whose symptoms met criteria for conversion disorder. According to the Diagnostic and Statistical Manual of Mental Disorders 5 Text Revision, conversion disorder is one or more deficits affecting voluntary motor or sensory function, impairing functioning, without identifiable physiological or medical cause of the deficits, and complete resolution [1]. The treatment of patients with BPD is difficult, probably because a whole range of psychopathology of personality is represented [20]. Borderline Personality Disorder probably represents a heterogeneous disorder for which no single pharmacological treatment has proven efficacious [21]. It follows that treatment must be targeted towards comorbid conditions and distressing symptoms, including neurological components.

In conclusion, a multi-specialty approach should continue to be adopted in the management of patients with BPD. A complete neurological evaluation should accompany the initial clinical examination for early identification of subtle and atypical presentations. In so doing, the quality of care is improved.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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