

A tale of two viruses: A bipolar disorder patient's path to Varicella Zoster Meningoencephalitis diagnosis in the pandemic era

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1 | BACKGROUND

Bipolar disorder (BD) is a chronic psychiatric condition, presenting with manic and depressive episodes interspersed with periods of euthymia. However, an array of somatic conditions can mimic or exacerbate symptoms of BD, requiring an in-depth differential diagnosis. The SARS-CoV-2 pandemic has been associated with a spectrum of neuropsychiatric symptoms, further complicating the diagnostic landscape. Here, we present an unusual case of Varicella Zoster Virus (VZV) reactivation, manifesting as Varicella Zoster Meningoencephalitis (VZME), in a 63-year-old female with a long-standing diagnosis of BD, following SARS-CoV-2 infection.

2 | CASE REPORT

The patient, with a history of BD since 1987 and an episode of shingles in 2016, embarked on an exhaustive journey through various specialists' offices after her bout with SARS-CoV-2 in October 2022, in which she suffered from fever and respiratory symptoms. After her viral infection, she experienced symptoms including transient perioral herpes, severe persisting headaches with recurrent exacerbation, fatigue, paraesthesia, episodes lasting up to 60 min in which she was incapable of moving her head and limbs, increased startle response and altered psychopathology such as affective incontinence and heightened impulsivity. These were dismissed as manifestations of her existing psychiatric disorder. This oversight likely delayed a comprehensive evaluation of her condition.

The turning point came in June 2023 when she was admitted to our psychiatric hospital. A comprehensive examination, including a lumbar puncture, revealed inflammatory changes, and VZV in her cerebrospinal fluid (CSF), a pivotal discovery in guiding the subsequent course of action. The patient was promptly started on intravenous aciclovir, resulting in significant improvement. Her somotoric symptoms and increased startle response resolved completely, headaches diminished, and her affect greatly stabilized.

3 | DISCUSSION

This case underscores the need to consider organic causes when new or worsening neurological or psychiatric symptoms arise, even in the presence of a known psychiatric diagnosis. Affective incontinence, impulsivity, and frontal disinhibition, despite being congruent with BD, can also be manifestations of viral encephalitis. Especially during the SARS-CoV-2 pandemic, there is a rising number of reports on neurological syndromes postinfection, and this patient's case of VZME adds to the growing body of evidence of these complications.¹

Notably, the psychopathological symptoms blurred the diagnostic boundaries, leading to an initial misattribution of symptoms to BD. The phenomenon of "diagnostic overshadowing," where physical symptoms are wrongly attributed to mental health disorders, played a role in delaying our patient's diagnosis.²

Such overshadowing significantly impacts healthcare outcomes, leading to reduced life expectancy in patients with psychiatric disorders. These patients often face delayed or incorrect diagnoses and

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suboptimal treatment for their physical health concerns. This is evidenced by a striking mortality gap, where individuals with serious mental illness have a life expectancy 10–25 years shorter than the general population, not only due to factors like suicide or accidents but also significantly attributed to physical health conditions that are often overlooked or undertreated.³

The diagnosis of VZME in this case underscores the importance of being vigilant about VZV reactivation, especially in those with a history of VZV infections like shingles. Factors like immunosenescence or stressors from infections such as SARS-CoV-2 can trigger viral reactivation, leading to severe complications including encephalitis. Thorough investigation and detection, as demonstrated by this case, can lead to substantial recovery,⁴ and clinicians should remain vigilant about such possible complications in patients with recent or active SARS-CoV-2 infection.⁵

This case highlights the pitfalls of 'diagnostic overshadowing' where new medical symptoms are mistakenly linked to existing mental health conditions. This not only delays the diagnosis but also the appropriate treatment. Clinicians should exercise caution in attributing all symptoms to an existing psychiatric diagnosis, particularly if they deviate from the patient's typical presentation or when new neurological symptoms appear.

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CONFLICT OF INTEREST STATEMENT

The authors report no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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Key Message

The labyrinth of psychiatric diagnoses can often be puzzling, and sometimes, the true pathogenesis lurks within the complex interplay between psychiatric and organic disorders. A high index of suspicion, combined with a broadened diagnostic perspective, is crucial in such scenarios. This case offers an important reminder of the intricate ways in which viral pathogens can affect the CNS and masquerade as psychiatric disorders, emphasizing the importance of thorough evaluation and timely intervention.

Learning Points

- Beware of Diagnostic Overshadowing: Psychiatric symptoms should not automatically dismiss physical health concerns, as "diagnostic overshadowing" can delay accurate diagnosis and treatment.
- Consider Organic Causes: When patients with psychiatric disorders exhibit atypical or worsening symptoms, clinicians should consider organic etiologies, especially during public health crises like the COVID-19 pandemic.
- Timely Evaluation Is Crucial: Swift and thorough evaluation can lead to timely intervention and improved patient outcomes, even when symptoms initially appear to be related to mental health.

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