



(CASE REPORT)



Navigating the intersection of ultradian rapid cycling bipolar disorder and OCD: A detailed case analysis

EL FELLAH SARA*, ADALI IMANE and MANOUDI FATIHA

Research Team for Mental Health, University Psychiatric Service IBN Nafis Hospital, Mohammed VI University Hospital, Marrakech. Morocco.

World Journal of Advanced Research and Reviews, 2024, 22(03), 1026–1031

Publication history: Received on 12 April 2024 revised on 20 May 2024; accepted on 22 May 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.22.3.1582>

Abstract

This article presents a detailed case analysis of a 33-year-old woman diagnosed with ultradian rapid cycling bipolar disorder (RCBD) and obsessive-compulsive disorder (OCD). Bipolar disorder, a chronic psychiatric condition characterized by alternating mood episodes, includes a subtype known as rapid cycling, marked by at least four affective episodes within a year. Ultradian cycling, a more severe form, involves mood oscillations occurring more than once every 24 hours. The subject of this study, Nadia, exhibited extreme mood swings within 24 to 48 hours, along with severe OCD symptoms, complicating her treatment. Her case highlights the challenges of managing RCBD, particularly in the presence of comorbid OCD, and underscores the need for a comprehensive treatment approach combining pharmacological and psychotherapeutic strategies. Despite resistance to several medications, Nadia responded favorably to a regimen including sodium valproate, lamotrigine, and amisulpride, alongside cognitive-behavioral therapy (CBT). This case underscores the importance of personalized treatment plans and vigilant therapeutic approaches in managing complex cases of RCBD with OCD comorbidity. The findings contribute valuable insights into the interplay between bipolar disorder and OCD, emphasizing the necessity for integrated treatment modalities.

Keywords: Rapid cycling bipolar disorder (RCBD); Ultradian cycling; Mood stabilizers; Lithium resistance; Depressive episode; Manic episode; OCD symptoms; Comorbidity; Suicide risk; Cognitive-behavioral therapy (CBT); Pharmacological interventions; Treatment resistance

1. Introduction

Bipolar disorder is a chronic and serious psychiatric condition characterized by alternating depressive, manic, hypomanic, or mixed episodes, each lasting from days to several months. In 1974, Dunner and Fieve introduced the term "rapid cycling" to describe a subtype of bipolar disorder marked by at least four affective episodes (depressive, manic, hypomanic, or mixed) within a twelve-month period. They observed that this subtype exhibited a particular resistance to lithium treatment. Subsequent studies confirmed that individuals with rapid cycling bipolar disorder are more likely to be resistant to traditional treatment strategies, making stabilization challenging.

The prevalence of rapid cycling bipolar disorder (RCBD) is approximately 16.3% in both inpatient and outpatient populations. It is more common in females, with over 70% of rapid cyclers being women. The typical age of onset is around 21 years, and it is more frequently observed in patients with bipolar disorder type II. In most cases reported in studies and case reports, the disorder usually begins with a depressive episode.

There appears to be a relationship between the frequency of cycles and the duration of each mood episode, with episodes becoming shorter as cycle frequency increases. Mood cycles lasting days to weeks are termed "ultra-rapid

* Corresponding author: EL FELLAH SARA

cycling," while mood oscillations occurring more than once every 24 hours are known as "ultradian cycling." Although rapid cycling is included as a specifier in the DSM, there is no specifier for ultra-rapid and ultradian cycles, which are considered manifestations of the inherent mood lability in bipolar disorder, first noted by Kraepelin. The increased frequency of mood shifts complicates the diagnosis and differentiation from other disorders such as borderline personality disorder or ADHD.

The scientific literature on ultradian cyclers and their therapeutic management is limited and inconclusive. Therefore, each successfully treated case can provide valuable insights for clinicians. In this article, we present a case of a -year-old woman with an ultradian cycling pattern induced during her hospitalization, successfully treated with a combination of three mood stabilizers and an atypical antipsychotic.

Annamma, 33, disclosed to her mother that she intended to end her life. She felt driven by what she perceived as signs urging her to join her father, who had died by suicide at the age of 34. This significant detail coincided with her turning 34 just four days before her admission.

2. Case study

Nadia described experiencing a vision of a bright light while researching Islamic views on suicide after her father's death. She interpreted this as a divine sign indicating that suicide was the right path for her. This led to a rapid shift in her mood, marked by hyperactivity and agitation. During her assessment, she expressed a strong desire to bake multiple cakes, play music, and dance. Her behavior was incongruent and accompanied by grandiose ideas. Remarkably, she expressed excitement about the prospect of suicide, referring to it as an "adventure."

Nadia's mental health struggles began between the ages of 17 and 18. Initially, she was treated with Sertraline by her general practitioner. During a particularly severe depressive episode, she overdosed on Sertraline, which triggered a manic episode. This led her to engage in high-risk behaviors, including believing she was famous and accruing significant debt. Her condition necessitated multiple hospitalizations due to violent mood swings.

Nadia was diagnosed with rapid cycling bipolar disorder, with her condition showing a pattern of progressive deterioration. Despite her severe symptoms, all her routine clinical investigations, including a brain MRI performed during a previous hospitalization, were within normal ranges and unremarkable.

2.1. Violent Mood Swings

When Nadia was acutely unwell, her moods would fluctuate drastically between elation and depression within a 24-hour period. For instance, she frequently experienced brief hypomanic episodes. In these states, she would become excessively talkative, exhibit a decreased need for sleep, engage in impulsive spending sprees, and have an inflated self-esteem, such as when she insisted in the morning that she was going to Thailand. However, by the evening, she would plummet into a profound depressive state characterized by psychomotor retardation, social withdrawal, feelings of worthlessness, and pervasive sadness.

These distinct shifts in mood and activity occurred within 24 to 48 hours. During the early part of her hospital stay, she continued to experience multiple mood episodes of opposite polarity until an effective therapeutic regimen was established. Her elated mood was consistently accompanied by grandiose thoughts, including a belief that she could fly. On several occasions, she attempted to act on this belief by trying to jump off fences or tables.

During her depressive episodes, Nadia exhibited marked psychomotor retardation, moving and speaking slowly, and often isolating herself from others. She experienced intense feelings of hopelessness and worthlessness, struggled with overwhelming fatigue, and had difficulty concentrating. Her appetite and sleep patterns were also severely disrupted, further exacerbating her depressive symptoms.

2.2. Obsessive Compulsive Disorder

As we understand, obsessive-compulsive disorder (OCD) can manifest with varying symptoms in different individuals. Generally, OCD involves a particular pattern of thoughts and behaviors. Nadia exhibits her own specific OCD symptoms; she adheres to a strict routine, structure, and organization in her daily activities. She finds her OCD routine exhausting and prefers to use electric ovens instead of gas due to her fears. While dressing, she feels compelled to look in the mirror a set number of times. Nadia recalls having OCD traits since childhood. For instance, after bathing, she couldn't touch the ground or any objects. Her room was cluttered with unused items, as she was reluctant to throw anything away, resulting in an accumulation of unmanageable clutter.

The obsession caused intense anxiety and distress. Consequently, she engaged in repetitive behaviors and mental acts. These compulsive behaviors provided temporary relief from the anxiety, only for it to return with renewed force, perpetuating the cycle. Most patients with OCD experience both obsessive thoughts and compulsions, though one may be less apparent than the other. In Nadia's case, her obsessions dominate over her compulsions.

The comorbidity of OCD and bipolar disorder (BD) is increasingly recognized in recent times. While they share some common symptoms, there are also distinct differences between the two conditions. Nadia reported with greater insight that she experiences déjà vu feelings before the onset of her manic episodes. She also noted that her OCD symptoms tend to diminish just before her hypomanic periods. This observation has been recently corroborated in clinical practice. Nadia described her short-lived elevated moods as "mini-high periods." She admitted that she frequently experiences these brief episodes of hypomania and depression, which contribute to significant morbidity.

2.3. Risk factors and behaviours

During one of her manic episodes, Nadia reported seeing her father's image behind the ceiling light. In an attempt to touch him, she climbed onto a table and tried to open the light fixture. Additionally, she has displayed behavior such as crawling on the floor like a cat and exhibiting sexual disinhibition. When acutely unwell, she has been heard shouting her slogan, "Death is an adventure." Nadia engages in risky behaviors when manic. She has detailed her plans and actions during these periods. For instance, she sometimes becomes fixated on ending her life, drawing connections to previous instances of reading religious texts and interpreting perceived signs as a divine endorsement of suicide. Her manic episodes are often characterized by impulsive overspending, usually related to her fixed beliefs on a specific topic. In a recent manic episode, she claimed that she could jump in front of a car because she believed she had superpowers. Nadia has consistently reported that she would only harm herself and not others. She has frequently expressed suicidal ideation and has, on several occasions, elaborated on her plans to end her life. Her mental health condition is marked by distinct warning signs of both her elevated and depressive periods.

When her mood shifts towards mania, Nadia often exhibits grandiose delusions, such as believing she possesses special abilities or a unique destiny. These delusions drive her to engage in hazardous activities without regard for her safety. Conversely, her depressive episodes are marked by profound despair, hopelessness, and a pervasive sense of worthlessness. During these times, she isolates herself, experiences significant psychomotor retardation, and is overwhelmed by thoughts of death and dying.

Nadia's case exemplifies the complex interplay between bipolar disorder and OCD. Her manic periods often exacerbate her obsessive thoughts, leading to an intensification of compulsive behaviors. However, during depressive episodes, the compulsions become less pronounced, overshadowed by her debilitating depressive symptoms. The cyclical nature of her mood disturbances, combined with her obsessive-compulsive tendencies, presents significant challenges for treatment and management.

Her case highlights the necessity for a comprehensive treatment approach that addresses both her bipolar disorder and OCD. Effective management requires not only pharmacological interventions, but also psychotherapeutic strategies aimed at mitigating her risk behaviors and providing her with coping mechanisms to manage her symptoms. This includes close monitoring during both her manic and depressive episodes to promptly address any emergent risks.

2.4. Treatments

Eventually, Nadia became more stable in the hospital, experiencing only brief periods of elation and depression. On a few occasions, she still claimed she could fly and was indestructible. She responded well to Haloperidol, and a regimen of sodium valproate 1500mg in divided doses, along with lamotrigine 300mg. Additionally, she was administered amisulpride 300mg twice daily. However, her treatment history includes various complications with different medications.

Olanzapine had to be discontinued due to metabolic syndrome and dyskinesic movements of the lips. Quetiapine caused problems with deglutition, and she had an allergic reaction to risperidone. Haloperidol induced severe extrapyramidal symptoms (EPS), while lithium caused an embarrassing tremor that persisted even after discontinuation. As a result, lithium was replaced with Depakine. During her elated periods, Annamma was at a high risk of accidents and felt deeply embarrassed about these episodes. She once expressed her helplessness, saying, "I can hide my depression, but I cannot hide my high periods and the indignity that goes with it." After various trials with mood stabilizers and psychotropics, Nadia eventually responded favorably to a combination of medications: amisulpride 600mg daily, lamotrigine 100mg in the morning and 200mg at night, and sodium valproate 500mg in the morning and 1000mg at night.

Once her mood became stable with drug therapies, psychological therapies were introduced. Cognitive-behavioral therapy (CBT) had a beneficial effect, helping Nadia gain more insight into the psychodynamics of her mood. CBT enabled her to identify triggers that might cause a mood episode and develop healthier thinking and behavioral patterns to better manage her mood swings.

Annamma's case is notable for her sensitivity to different psychotropic medications:

- **Quetiapine:** Caused deglutition problems
- **Olanzapine:** Led to weight gain and metabolic syndrome
- **Risperidone:** Induced allergic reactions
- **Aripiprazole:** Heightened anxiety levels and akathisia
- **Haloperidol:** Caused severe EPS
- **Antidepressants:** Triggered hypomania, and mania.
- **Lithium:** Produced a persistent tremor
- **Clozapine:** Known for inducing deglutition problems, hence not considered due to the previous experience with quetiapine.

OCD symptoms prevented the use of electroconvulsive therapy (ECT) due to the potential risks of ECT exacerbating OCD in some cases. Lamotrigine was found to have some anti-obsessional effects (Badner & Gershon, 2002), and Annamma responded favorably to 300mg of lamotrigine in divided doses, which helped control her depression and OCD symptoms. However, the choices for treating her OCD were limited due to the risk of destabilizing her moods. Therefore, psychological therapies were offered, specifically CBT and exposure with response prevention (ERP), which are supported by numerous clinical trials.

3. Discussion

Bipolar disorder is a severe and invalidating condition, with a chronic course and a function impairment that is often important. Rapid cycling is not uncommon among bipolar patients and seems to represent a transitional phase of the disease rather than a stable status. We have presented a case of a patient difficult to stabilize, for many reasons: First, she has been treated with a plethora of molecules for the last 30 years, therefore she is much more resistant to treatment than a drug-naïve individual. Secondly, she suffers from a bipolar I disorder with mixed features. It has been shown that mixed states are difficult to treat and most of the cases require a combination of more than one pharmacological molecule to achieve remission. Moreover, this is a patient with a history of rapid cycling since the early course of the disease, that presents during her hospitalisation an ultradian-like pattern with mixed depressive symptoms every morning and what seems to be a complete remission every evening. Such rapid cycling patterns have also been linked to poorer response to treatment.

Cases with far frequent episodes are designated as ultra-rapid cycling and instances where mood swings occur within 24-hour period is recognized as ultradian rapid cycling. Nadia's presentation was that of ultradian rapid cycling. Suicidal risks, risks of accident and accidental death is high during the elated periods and the risks of impulsive and suicide becomes high during low periods. Rapid cycling bipolar disorder is reported to be more common among females whose illness started at an earlier age (Marneros & and Angst 2000).

While some authors argue it as a distinct subtype of bipolar disorder, a few still argue that it is a transient complication of the longterm course of BD (Marneros & and Angst 2000). Studies indicate that 20% of bipolar patients suffer from OCD. Autoimmune etiology has been recently brought to the etiological discussion of BD. This is mainly based on the observation of coexistence of other autoimmune disorders in the patient and close family relatives. Nadia's father suffered from scleroderma. The case I have presented is an example supporting the autoimmune etiology.

One wonders whether this patient's idiosyncratic reactions to several of the psychotropic itself could be an autoimmune reaction. This case report of Ultra-rapid cycling bipolar disorder has most of the complexities of BD. Early recognition and vigilant therapeutic approach have been emphasized.

Some of the unknown areas of bipolar disorder including association with autoimmunity and OCD are unveiled here and they pose many questions.

Limitations

we were limited with the choice of her medications. My patient has been reminded of the fact that Valproate has a high teratogenicity potential and children exposed in utero to valproate have a high risk for congenital malformations and neurodevelopmental disorders. Moreover, she has been informed that she is on two anticonvulsants which could potentially cancel the effect of contraceptive pills. Standardized treatment measure is limited for rapid cycling BD. There are no psychometric measures to quantify response to treatment and prognosis and must rely on the past experience of the clinician and clinical intuitions.

4. Conclusion

Rapid-cycling bipolar disorder is rare but is difficult to treat and has a high rate of suicide. It causes considerable disruption to the life of the patient and their family. Fortunately, in more than 50% of cases, rapid cycling lasts for less than two years. It generally develops late during BD. Often, rapid cycling can be managed by the correct identification and management of a small number of comorbid medical problems and treatment variables. Rapid cycling is relatively resistant to lithium treatment, but has a better response to carbamazepine and sodium valproate. Sometimes, symptomatic control requires combinations of several mood stabilizers with or without an antipsychotic.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Dunner DL, Fieve RR. Clinical Factors in Lithium Carbonate Prophylaxis Failure. *Arch Gen Psychiatry*. 1974;30(2):229-233. doi:10.1001/archpsyc.1974.01760140055005.
- [2] Carvalho A, Dimellis D, Gonda X, Vieta E, McIntyre R, Fountoulakis K. Rapid Cycling in Bipolar Disorder. *The Journal of Clinical Psychiatry*. 2014;75(06):e578-e586.
- [3] Calabrese JR, Shelton MD, Rappoport DJ. Rapid Cycling Bipolar Disorder: A Review of Current Treatment Options. *J Clin Psychiatry*. 2001;62(5):381-390. doi:10.4088/JCP.v62n0506.
- [4] Kraepelin E. *Manic-Depressive Insanity and Paranoia*. E.S. Livingstone; 1921.
- [5] Kramlinger KG, Post RM. Ultra-rapid and Ultradian Cycling in Bipolar Affective Illness. *Br J Psychiatry*. 1996;168(3):314-323. doi:10.1192/bjp.168.3.314.
- [6] Bauer M, Whybrow PC. Rapid Cycling Bipolar Affective Disorder. I. Association with Grade I Hypothyroidism. *Arch Gen Psychiatry*. 1990;47(5):427-432. doi:10.1001/archpsyc.1990.01810170041007.
- [7] Azorin JM, Kaladjian A, Adida M, Hantouche EG. Current Findings on Rapid Cycling Bipolar Disorder. *Encephale*. 2008;34(3):295-299. doi:10.1016/j.encep.2007.11.006.
- [8] Beck, A. T., Steer, R. A., Kovacs, M., et al (1985) Hopelessness and eventual suicide: A 10 year prospective study of patients hospitalised with suicidal ideation. *American journal of Psychiatry*, 142, 559-560
- [9] Post, R.M., Danicoff, K.D., Frye, M.A. & Leverich, G.H. (1997) Algorithms for bipolar mania, In : *Mood Disorder, Systemic Medication Management*, (Ed.) Rush, A.J., Karger : Basel, Switzerland (Reprinted : Panther publication private limited. Bangalore
- [10] Marneros A. and Angst J: *Bipolar Disorders*. London: Kluwer Academic Publishers, 2000
- [11] Schneck CD, Miklowitz DJ, Miyahara S, Araga M, Wisniewski S, Gyulai L, et al. The Prospective Course of Rapid-Cycling Bipolar Disorder: Findings from the STEP-BD. *Am J Psychiatry*. 2008;165(3):370-377. doi:10.1176/appi.ajp.2007.06101693.

- [12] Kramlinger K, Post R. Ultra-Rapid and Ultradian Cycling in Bipolar Affective Illness. *British Journal of Psychiatry*. 1996;168(3):314-323.
- [13] Kramlinger, K.G. & Post, R.M. (1996) Ultra rapid and ultradian cycling in bipolar affective illness. *British Journal of Psychiatry*, 168, 314-323.
- [14] Altshuler LL, Post RM, Leverich GS, Mikalauskas K, Rosoff A, Ackerman L. Antidepressant-Induced Mania and Cycle Acceleration: A Controversy Revisited. *Am J Psychiatry*. 1995;152(8):1130-1138. doi:10.1176/ajp.152.8.1130.
- [15] Muneer A. Mixed States in Bipolar Disorder: Etiology, Pathogenesis and Treatment. *Chonnam Medical Journal*. 2017;53(1):1.
- [16] Teixeira L. Antonio and Baur E & Moises : A Clinician's Introduction to the Immune Basis of Mental Disorders. Oxford: Oxford University Press, 2019.
- [17] American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. American Psychiatric Publishing; 2013.