Antidepressant Discontinuation Syndrome Resulting in a Suicide Attempt: A Case Report

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Antidepressant discontinuation syndrome (ADS) is a common complication of abrupt cessation or inadequate tapering of antidepressants. In one randomized controlled trial,[1] abrupt paroxetine discontinuation resulted in withdrawal symptoms in 34.5% of patients vs 13.5% with placebo, and another[2] reported that the most common symptoms of sertraline discontinuation were dizziness (33.3%), vivid dreams (26.4%), and fatigue (22.2%), occurring within 1 week of discontinuation. Suicide remains a public health crisis, with 45,000 people dying of suicide annually in the United States.[3] While ADS has been reported to cause suicidal ideation,[4] there are no published reports of a suicide attempt. We present a case of a patient with ADS that attempted suicide.

Case Report

Ms A, a 22-year-old female with a history of major depressive disorder (MDD), generalized anxiety disorder (GAD), alcohol use disorder (AUD), and anorexia nervosa (AN) in remission presented to the emergency department after intentional ingestion of a half-bottle of acetaminophen, taken all at once. She had taken escitalopram 10 mg for 2 years but discontinued it 7 days prior, as she gave her remaining medication to her sister and then was unable to reach her primary care physician. In addition to reported depressive symptoms of fatigue, anhedonia, loss of appetite, and suicidal ideation, she was experiencing intermittent dizziness, myalgias, and "electric shocks," which began 4 days after she discontinued escitalopram. The patient denied suicidal ideation prior to discontinuation of escitalopram despite consistent daily alcohol usage; she reported that the only changed variable was her antidepressant discontinuation. She had begun drinking in college, increasing to drinking 1 bottle of wine daily. She denied significant past alcohol withdrawal. She had presented previously for self-harming behaviors but denied any history of suicidal ideation or suicide attempts. She endorsed emotional trauma from her father with AUD. The patient was single, living with her mother, and working as a full-time nanny. Home medications included hydroxyzine 25 mg, ondansetron 4 mg, and naltrexone 50 mg.

Diagnoses of MDD, GAD, AN, and AUD were made using *DSM-5* criteria. She screened positive for suicidal ideation with plan but without intent on the Columbia-Suicide Severity Rating Scale (CSSRS)[5] and was assigned a 1:1 safety assistant. Her initial laboratory results were significant for ethanol of 246 mg/dL and acetaminophen of 154 µg/mL, which prompted admission to the general medical floor. Once her acetaminophen and alcohol levels were undetectable, she was transferred for a voluntary inpatient psychiatry admission. There, escitalopram was restarted and titrated to 20 mg/d, and after 4 days, her depressive symptoms and antidepressant withdrawal symptoms resolved, as measured by CSSRS, Discontinuation-Emergent Signs and Symptoms Scale,[6] and clinician judgment. She was future-oriented, citing protective factors, consistently denied suicidal ideation, and did not show self-injurious behavior or suicidal gestures. On the fifth day, she was discharged on escitalopram 20 mg/d with outpatient psychiatry and therapy follow-up.

Discussion

This is the first report to our knowledge of ADS leading to a suicide attempt. Current literature suggests that the risk of ADS is increased after discontinuing antidepressants with relatively short half-lives.[7] Paroxetine, not escitalopram, is the most often reported antidepressant associated with ADS, given its short half-life of 15–20 hours. However, escitalopram's half-life (27–32 hours) is not relatively much longer considering all antidepressant half-lives. The risk of ADS between antidepressants should be treated as a spectrum, rather than a binary risk, dependent on half-life. When adding the variability of individual hepatic metabolism, ADS must be discussed as a risk from discontinuation of any antidepressant.

This case also exemplifies the challenge of determining the etiology of a suicide attempt. While the *DSM-5* is a useful diagnostic tool, suicidality, and furthermore ADS, are not included as current diagnoses. Therefore, usage of diagnostic criteria is important, but it is imperative to understand a

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patient's context and baseline outside of specific criteria to appropriately identify patients with these conditions. When determining the etiology of her suicidal ideation, substance-induced depressive disorder was considered as Ms A presented with an alcohol level of 246 mg/dL. However, she reported that her alcohol usage was unchanged, with new-onset suicidal ideation after discontinuing her medication, making ADS the likely stressor that led to her attempt. Another explanation is that both chronic alcohol use and ADS contributed to her suicidal ideation. Chronic alcohol usage up-regulates glutamate channels, and SSRIs are designed to modulate neurotransmitters.[8] As the pathophysiology of ADS remains undefined, we cannot draw definite conclusions and deny a multifactorial etiology. This case highlights the importance of close monitoring and suicidality screening while tapering antidepressants, and carefully understanding the context of a suicide attempt to determine likely etiology.

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