

# KETAMINE KALEIDOSCOPE: CHALLENGING CONDITIONS, PERSONALITY PERILS AND THE DEMAND FOR DILIGENT FOLLOW-UP

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## ABSTRACT

A 75-year-old woman with treatment-resistant depression experienced an unexpected increase in suicidal ideation after ketamine infusion therapy, despite ketamine's known benefits for depression. The case explores her complex background, including psychosocial stressors, genetic predisposition, and personality traits, which may have influenced her adverse response. The report emphasizes the need for careful administration of ketamine, particularly in patients with personality disorders, highlighting the complexities of mental health treatment and the importance of individualized care.

## INTRODUCTION

Ketamine has long been used as an anesthetic, but recent research has explored its efficacy in treating depression and suicidality, especially in treatment-resistant cases. Despite evidence of rapid but temporary antidepressant effects, ketamine's application raises concerns about dosing, efficacy, and variability in patient responses. Its mechanism involves NMDA receptor antagonism and the production of antidepressant metabolites. Genetic factors, such as variations in BDNF, also influence treatment outcomes. Despite promising results, cases like this highlight the need for individualized treatment and a cautious approach.

## PRESENTATION

A 75-year-old woman, suffering from treatment-resistant depression, presented to the emergency department after a suicide attempt. She had undergone four cycles of ketamine therapy, which failed to resolve her depressive symptoms and suicidal ideation. Following the most recent infusion, she experienced emotional flooding, intensified suicidal thoughts, and unresolved feelings of worthlessness. A mental status examination revealed passive suicidal ideation and fair insight, but poor judgment.

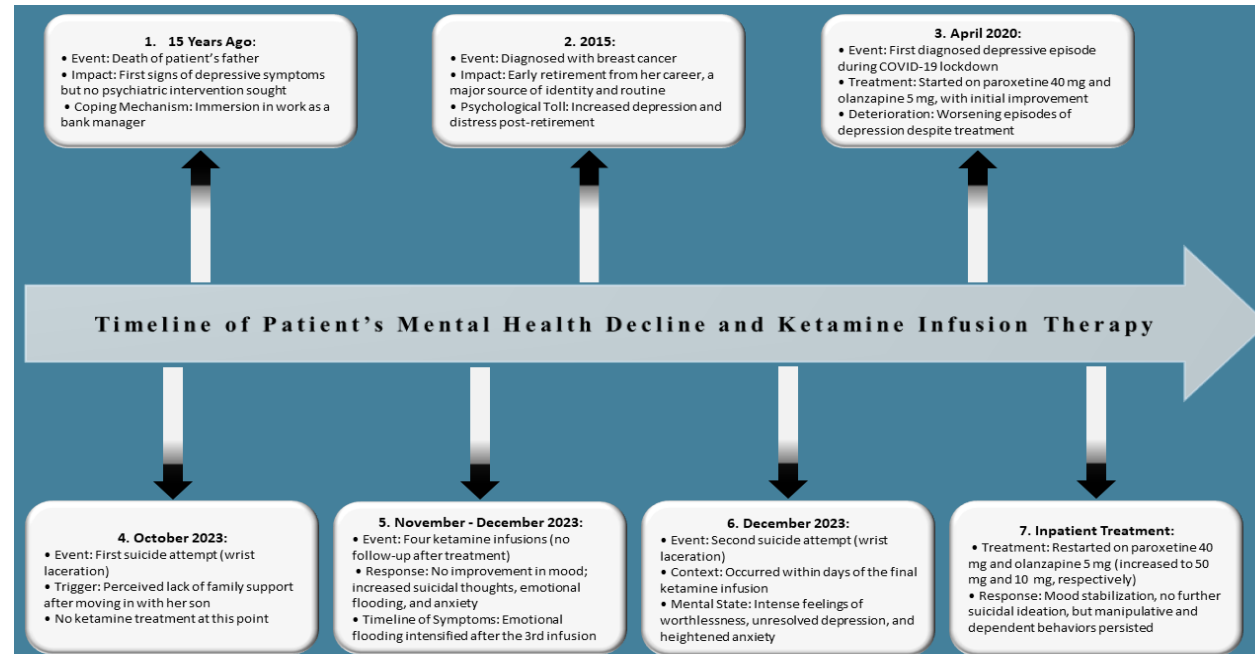
## PAST MEDICAL HISTORY

- Diabetes, hypertension, hypercholesterolemia, hypothyroidism, osteopenia
- Breast cancer (currently in remission)
- Impact: Medical comorbidities contributed to overall health decline and depressive episodes

## FAMILY HISTORY

- Genetic Predisposition: Depression and suicidal ideation in her granddaughter
- Alcoholism: History of alcohol abuse in her father and uncle

## TIMELINE



## BACKGROUND

Six months prior, the patient moved in with her son, which led to feelings of social isolation and despair. She had a history of depression, initially triggered by her father's death 15 years earlier, and managed it through work. Her condition worsened after early retirement due to breast cancer, leading to her first diagnosed depressive episode during the COVID-19 lockdown. Despite treatment with paroxetine and olanzapine, her depression worsened, resulting in multiple suicide attempts, compounded by a lack of family support and unresolved despair.

## DISCUSSION

This case highlights the challenges of treating treatment-resistant depression in elderly patients with personality traits like emotional flooding and impulsivity. While ketamine can be effective, it may worsen symptoms in vulnerable individuals. The patient's decline after ketamine may have been influenced by anxiety, personality traits, and genetic factors. The case underscores the importance of individualized treatment and close follow-up for patients undergoing ketamine therapy, especially when personality traits complicate care.

## CONCLUSION

This case underscores the intricacies of treating resistant depression, particularly with newer treatments like ketamine. It calls for a thorough understanding of the genetic, psychosocial, and personality factors that may affect treatment outcomes. Individualized treatment plans and vigilant follow-up are essential in ensuring patient safety and the efficacy of therapeutic interventions like ketamine. The case emphasizes the need for further research into the varied effects of ketamine, especially in patients with complex psychological profiles.

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