Brazilian Journal of Psychiatry
bjp
Revista Brasileira de Psiquiatria

CC BY

LETTER TO THE EDITORS

Acute suicidal behavior following ayahuasca ingestion in a clinical trial setting: a case report

Braz J Psychiatry. 2026;48:e20254354
doi:10.47626/1516-4446-2025-4354

CC BY

Research on psychedelic drugs (substances such as psilocybin, lysergic acid, ketamine, and ayahuasca) has gained significant interest in the last decade due to their rapid and potent effects on depressive disorders,[1] and, most notably, due to their unique ability to quickly reduce suicidal behaviors, a response not observed in other pharmacological classes.[2] However, the use of psychedelics may present certain risks that are not yet fully understood. In this article, we present a case of a patient with major depressive disorder who developed suicidal behavior immediately following the administration of ayahuasca during a clinical trial. To the best of our knowledge, this is the first case report of new-onset suicidal behavior in a clinical research setting involving ayahuasca.

This case concerns an 18-year-old Caucasian male patient who was recruited in 2022 for the study "Effects of four doses of ayahuasca or esketamine on major depressive disorder: a randomized, double-blind study."[3] Written consent was obtained for participation in the study and for the publication of this case report. All procedures were approved by the ethics committee of Hospital das Clínicas de Ribeirão Preto and were conducted in accordance with the Declaration of Helsinki and the ethical standards set by Brazilian health authorities.

Symptoms of major depressive disorder first appeared at 6 years old, associated with severe psychosocial impairment. The diagnosis was made by the child psychiatry team of the Hospital das Clínicas de Ribeirão Preto, and the patient was followed by them from the age of 6 to 11 years. The patient had undergone optimized therapeutic trials with fluoxetine, venlafaxine, and escitalopram, as well as psychotherapeutic and psychopedagogical follow-up (6 years in total), with little to no response. During the course of the disorder, the patient experienced no suicidal behavior or attempts. At the time he volunteered for the current trial, he was not receiving any pharmaceutical, psychotherapeutic, or complementary treatment. Moderate-severe major depressive disorder with comorbid social anxiety disorder was diagnosed by a trained professional, using the Structured Clinical Interview for DSM-5. No other comorbid conditions were diagnosed. Baseline evaluation scores were 32 on the Hospital Anxiety and Depression Scale and 34 on the Beck Depression Inventory (BDI), both consistent with a severe depressive episode. The patient reported no suicidality, scoring zero on BDI item 9, which specifically assesses thoughts of self-harm or suicide. No tool to specifically assess suicidality was used in this study protocol. Due to a history of psychomotor developmental delay during early childhood, a cognitive test battery was administered (Teste Não-Verbal de Inteligência Geral [BETA III]) to ensure the patient's ability to provide consent, the results of which were unremarkable.

The study design included four weekly sessions of ayahuasca (1 mL/kg) or oral esketamine (2 mg/kg), administered in a double-blind design, with no structured form of psychedelic-assisted psychotherapy. To ensure the participants' safety, the study protocol involved "daily checkpoints," evaluations in which the researcher asked patients to rate their current mood on a scale of 0-10. After each session, the patient was discharged without complaints or side effects. Four days after the second session, he reported a mood score of 1 (Figure 1A), a sharp decrease compared to previous days. He was tearful and described feelings of worthlessness and loneliness, but without suicidal thoughts. He remained calm, noting he had felt this way before. The symptoms subsided within hours, and his mood improved the next day with no further action needed.

The third experimental session proceeded without incident. At the beginning of the session, the patient's BDI score was 31 (with 1 point on suicidality). By the end of the session, his BDI score had increased to 41, with a suicidality score of 2. Despite this, the volunteer remained in stable condition, reported no complaints, and denied any residual psychoactive effects. The patient was evaluated and assessed as stable by the supervising psychiatrist before being discharged from the hospital around 1:30 PM, accompanied by his mother, with instructions to contact the team if needed.

During the first daily checkpoint, around 7:00 PM, he reported feeling very tired, claiming that his mood was progressively worsening since the discharge and was exhibiting a wish to be dead. Immediately, the psychiatrist from the research team was contacted and took control over the case. Due to the severity of the situation, the study's blinding was broken and the psychiatrist was informed that the ingested substance was ayahuasca.

During a phone call with the psychiatrist, the patient reported feeling physically and emotionally drained. He described the last psychedelic session as exhausting, and failed attempts to sleep had worsened his mood. He expressed suicidal thoughts multiple times, saying he was too tired to consider alternatives, though he had no clear or structured plan. Conversely, he also showed ambivalence, expressing gratitude for the call and repeatedly stating he was doing his best to "keep fighting." He also gave permission for the psychiatrist to contact his mother.

Given the high suicide risk and access to lethal means (the patient was enrolled in barber school at the time of the event and thus had multiple razors and sharp scissors in his bedroom), along with the limitations of a phone

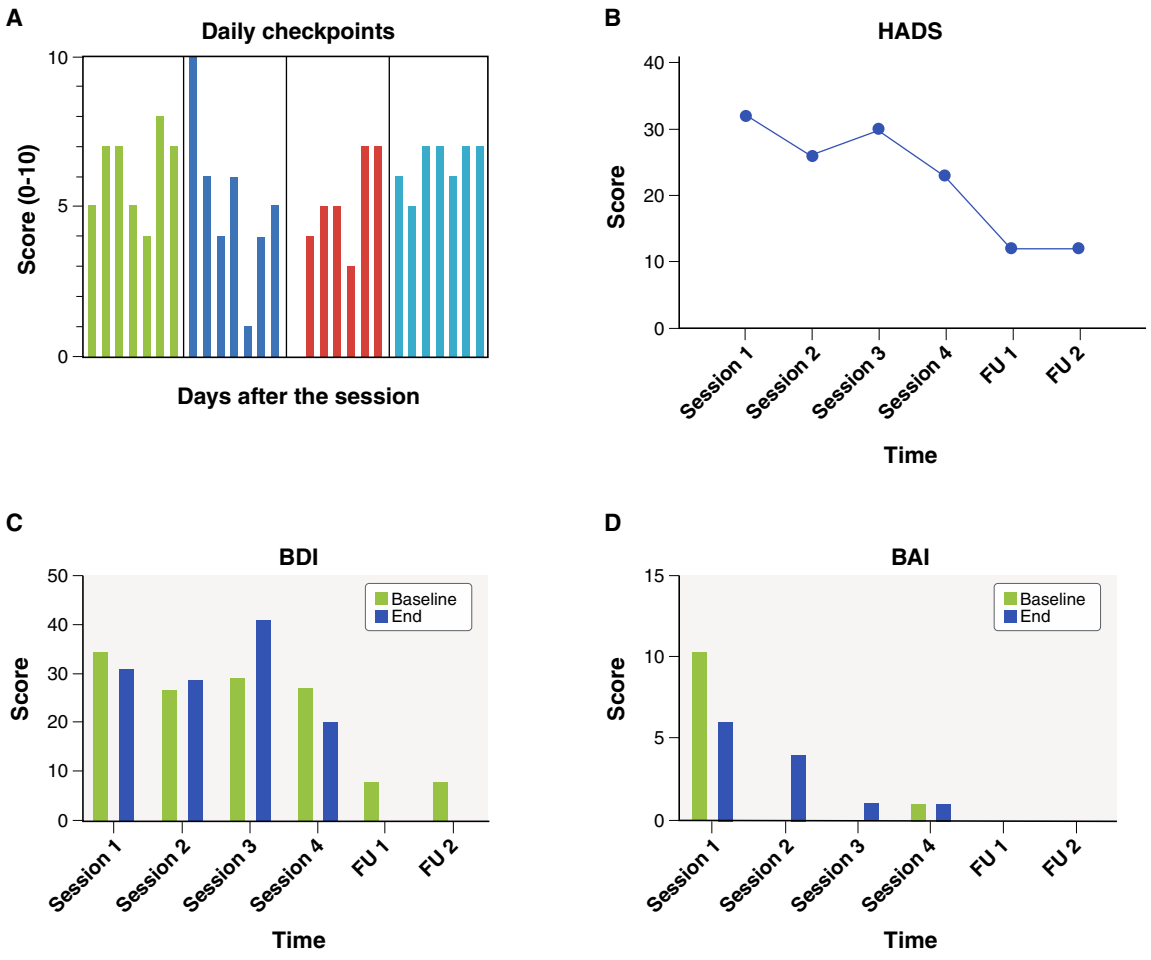


Figure 1 The patient's depressive condition over time. A) Daily monitoring of the patient on consecutive days following each experimental session, with weeks differentiated by color coding. The key event reported here occurred right after the third session (red bars). B) The primary study outcome, measured using the HADS at the end of the study and two follow-up points at 1 and 4 weeks after the last session. C and D) Depressive symptom measures (BDI and BAI, respectivelz), collected at the start and end of each session, as well as at both follow-up points. Data points with a value of zero are present but invisible due to their overlap with the X axis. BAI = Beck's Anxiety Inventory; BDI = Beck's Depression Inventory; FU 1 = follow-up at 1 week after the last session; FU 2 = follow-up at 4 weeks after the last session; HADS = Hospital Anxiety and Depression Scale.

assessment, an in-person emergency evaluation was arranged, which the patient agreed to. At 8:30 PM, the psychiatrist called the patient's mother, listed as his emergency contact. She initially agreed to bring him to the emergency service, but later said she hadn't gone because she couldn't find someone to watch her newborn. Instead, she gave him 2 mg of risperidone without medical advice. At that point, the patient was already sleeping in her bed. A safety plan was developed: he would not be left alone, he would go to the emergency service if suicidal thoughts persisted, and no further self-medication would occur. The mother agreed and was told to call the psychiatrist during the night if needed.

By the following morning, the patient spontaneously sent a message to the psychiatrist, reporting that he had gone through a "difficult, desperate moment," primarily linked to his difficulty resting after the experimental session, but that he was feeling much better. An in-person psychiatric evaluation was scheduled for the same day, during which the patient was found to be calm and communicative, explicitly denied active suicidal ideation, and was still experiencing a low mood. The patient expressed a desire to continue participating in the study and was considered by the evaluating psychiatrist to have preserved critical judgment and decision-making capacity. Therefore, a shared decision was made between the psychiatrist, the study's principal investigator, and the patient to complete the experimental schedule. Only the principal investigator and the psychiatrists were aware of the administered substance, while both the patient and the researchers performing the experiment remained blinded. After the episode, the patient was closely monitored by the team's psychiatrist for the duration of the study, with no recurring suicidal thoughts reported. The fourth and final experimental session, conducted under particularly strict supervision, was completed

without incident, as was the subsequent four-week follow-up period. The patient showed a positive response to treatment, as shown below in Figure 1. In the final interview, he described the treatment as deeply meaningful, improving his self-esteem and motivating future goals, such as finishing his barber course and finding work to help out at home. His mother also noted improvements in self-care, sociability, and communication. After completing the study, the patient was referred to the mood disorders specialized outpatient service at the Hospital das Clínicas de Ribeirão Preto for continued psychiatric follow-up. As of the writing of this case report, the patient has not experienced any further suicidal thoughts.

Secondary analyses of existing clinical trials with ayahuasca suggests that it may be associated with reduced suicidality among patients,[4,5] as has been observed with other hallucinogenic substances.[2] Although data on suicidal behaviors after ayahuasca ingestion is scarce, similar patterns have been reported after consuming other psychedelics. A large cross-sectional study[6] and a clinical trial[7] involving psilocybin demonstrated that, although rare, preexisting depressive symptoms and suicidality can worsen, resulting in an acute or subacute adverse effect.

In the present case, both the subjective report and the objective scales indicated that treatment was effective for the patient, suggesting that the suicidal behavior was acute, transitory, and not associated with a worse outcome during treatment. The lack of a structured suicide risk assessment tool represents a limitation and should be addressed in future studies. Additionally, the unprescribed administration of risperidone by the patient's mother highlights the ethical and safety challenges of ensuring adequate oversight in outpatient psychedelic trials. This case highlights the need for researchers to remain actively vigilant for similar cases, emphasizing the importance of close monitoring of study participants, particularly those with more severe and/or higher-risk conditions.

José Augusto S. **Reis**,[1] Giordano N. **Rossi**,[1] Anna Beatriz V. **Zacharias**,[1] Jaime E.C. **Hallak**,[1,2,3] Rafael G. **dos Santos**[1,2,3]

[1]*Departamento de Neurociências e Ciências do Comportamento, Faculdade de Medicina de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, SP, Brazil.* [2]*Instituto Nacional de Ciência e Tecnologia Translacional em Medicina, Conselho Nacional de Desenvolvimento Científico e Tecnológico, Ribeirão Preto, SP, Brazil.* [3]*International Center for Ethnobotanical Education, Research, and Service Barcelona, Spain.*

Submitted May 29 2025, accepted Aug 23 2025.

Disclosure

The authors declare no conflicts of interest.

Author contributions

JASR: Conceptualization, Data curation, Investigation, Methodology, Writing – original draft.
GNR: Data curation, Formal analysis, Investigation, Methodology, Writing – review & editing.
ABVZ: Formal analysis, Methodology, Visualization.
JECH: Conceptualization, Funding acquisition, Investigation, Methodology, Project administration, Resources, Supervision.
RGS: Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Supervision, Writing – review & editing.
All authors have read and approved of the final version to be published.

Handling Editor: João Castaldelli-Maia

How to cite this article: Reis JAS, Rossi GN, Zacharias ABV, Hallak JEC, dos Santos RG. Acute suicidal behavior following ayahuasca ingestion in a clinical trial setting: a case report. Braz J Psychiatry. 2026;48:e20254354. Epub 2025 Sep 29. http://doi.org/10.47626/1516-4446-2025-4354

References

1 Ko K, Kopra EI, Cleare AJ, Rucker JJ. Psychedelic therapy for depressive symptoms: a systematic review and meta-analysis J Affect Disord. 2023;322:194-204.
2 Zeifman RJ, Yu D, Singhal N, Wang G, Nayak SM, Weissman CR. Decreases in suicidality following psychedelic therapy: A meta-analysis of individual patient data across clinical trials. J Clin Psychiatry. 2022;83:39235.
3 dos Santos RG. ClinicalTrials.gov [Internet]. Ayahuasca and esketamine for major depression. [cited 2025 Oct 24]. https://clinicaltrials.gov/study/NCT07212946
4 Zeifman RJ, Palhano-Fontes F, Hallak J, Arcoverde E, Maia-Oliveira JP, Araujo DB. The impact of ayahuasca on suicidality: Results from a randomized controlled trial. Front Pharmacol. 2019;10:1325.
5 Z Zeifman RJ, Singhal N, Dos Santos RG, Sanches RF, Osório FL, Hallak JEC, et al. Rapid and sustained decreases in suicidality following a single dose of ayahuasca among individuals with recurrent major depressive disorder: results from an open-label trial. Psychopharmacology (Berl). 2021;238:453-59.
6 Carbonaro TM, Bradstreet MP, Barrett FS, MacLean KA, Jesse R, Johnson MW, et al. Survey study of challenging experiences after ingesting psilocybin mushrooms: acute and enduring positive and negative consequences. J Psychopharmacol. 2016;30:1268-78.
7 Goodwin GM, Aaronson ST, Alvarez O, Arden PC, Baker A, Bennett JC, et al. Single-dose psilocybin for a treatment-resistant episode of major depression. N Engl J Med. 2022;387:1637-1648.