Psychiatria Danubina, 2025 Vol. 37, No. 3, pp 383-385 https://doi.org/10.24869/psyd.2025.383 *Case Report*
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Revisiting ketamine abreaction: A case report in depressive and dissociative symptomatology

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INTRODUCTION

Ketamine is a dissociative anaesthetic agent that is an NMDA receptor antagonist. Over the years, interest in the use of ketamine in psychiatry has been increasing for the rapid treatment of major depressive disorder (Yavi et al., 2022, Mihaljević et al., 2020). Additional interest is given to ketamine assisted psychotherapy like abreaction. Here we present a case of depressive episode with dissociative disorder who underwent ketamine abreaction.

CASE PRESENTATION

53 years Female with no formal education, resident of Manang, Nepal presented with illness of insidious onset, continuous and progressive course since 1.5 years characterized by sadness, loss of interest, easy fatigability, sleep disturbance, loss of appetite, weight loss, feelings of guilt associated with on and off restlessness and difficulty in breathing. She consulted various psychiatrists and took medicines with good adherence, but no improvement was perceived.

Over time she had worsening of anxiety symptoms and would complain of difficulty staying at a place. She even started voicing of ideas of harming self although intent and planning could not be described. She was admitted on 5/4/2023 for diagnostic clarification and management. At admission, Hamilton anxiety rating scale (HAM-A) (Hamilton, 1959) score was 10 and Beck depression inventory(BDI) (Jackson-Koku, 2016) score was 15. We assumed that because of psychomotor agitation, she was not able to report her symptoms accurately hence the scores came lower. A plan to reassess the patient was made. The provisional diagnosis kept was Moderate depressive episode and Anxiety Nos. During the ward stay, dose of Mirtazapine was increased to 45 mg over 2 weeks. Gradually, her depressive symptoms reduced. Patient's family member took discharge on request due to perceived improvement. She came for follow up on 25/4/23. Upon going to home, the patient again started voicing similar symptoms. She was again admitted on 1/5/2023. Mirtazapine was tapered and stopped over a week. Desvenlafaxine was started and increased to 100 mg. Supportive sessions were taken but patient demonstrated a guarded affect, providing limited responses and appearing reluctant to engage fully in the interview. In 2nd admission, we noticed a pattern of her symptoms. Whenever the treating team or husband were around, she would complain of difficulty in breathing. This would continue for 30- 45 minutes and gradually as everyone dispersed, she would maintain as before. In view of the possibility of dissociative disorder, we tried to understand her secondary gains but she didn't share about her stressors even in the supportive sessions. She was continued on Jacobson's progressive muscle relaxation exercise (JPMR). Her personality assessment revealed dependent and anxious personality traits. Patient's symptoms worsened over days. Treatment possibilities were discussed and abreaction was planned. Patient and family members were informed about the procedure and written consent was taken.

Pre procedure – Complete blood count, Renal function test, Liver function test and Electrocardiogram were performed. Pre anaesthetic check-up was done by anaesthesiologist and the test was performed in minor theatre. Patient was kept nil per oral(NPO) from 6 hours before the procedure. Dextrose 5% infusion was started and IV Ketamine was diluted with 10 mg/ml in Normal Saline. A plan to administer 0.2 mg/kg of ketamine was done. Patient's weight was 70 kg. So, after calculating the dose, we planned on administering 15 mg Ketamine in intermittent bolus. Continuous monitoring of Blood pressure, Pulse rate, Electrocardiography and Oxygen saturation were done. Oxygen supply was ensured at the rate of 6 litres per minute. Injection Granisetran 1 mg was given to prevent emesis.

During procedure – IV Ketamine 5 mg was administered slowly initially and after 5 minutes' intermittent bolus top up of 5 mg was again administered to get the dissociative effect. Interview was started and direct questions were asked to the patient. At first, she was confused. But as 2nd dose was administered, patient started crying and told about her stressors. In about 20 minutes' time, IV Ketamine 5 mg was again topped up and the interview was continued. Suggestions were also given to the patient at that time.

Post procedure – After the session ended, the patient reported of some confusion that lasted for 10- 15 minutes but gradually gained full consciousness as assessed objectively and on Glasgow coma scale(GCS). She was shifted to the ward and vitals were monitored for 2 hours. She reported post procedural headache, which subsided with Paracetamol 500 mg. NPO was broken after 2 hours. After that, she maintained well.

In subsequent psychotherapeutic interventions, the identified psychosocial stressors were explored in detail and coping skills were taught. Since patient reported of on and off worries, dose of Desvenlafaxine was increased to 200 mg/day. The patient's condition gradually improved. One week later, both HAM-A and BDI score were 5. Patient followed up and was maintaining well till February 2024.

DISCUSSION

Abreaction has been tried with thoipentone sodium, propofol, (Pool et al., 2010), lorazepam (Seo et al. 2013) etc. The catharsis experienced during ketamine administration is both unique and psychologically significant. The patients describe a sense of detachment from their usual thought patterns thus creating a therapeutic space to explore and process emotions and traumas that have been suppressed for a long period of time. (Mikellides et al., 2024) Ketamine has well documented history in psychiatric use dating back several decades. (Khorramzadeh & Lofty, 1973) Studies done in India where Ketamine was administered intramuscularly for dissociative and anxiety disorders had demonstrated that smaller sub anaesthetic doses acted as an abreactant agent (Goleccha et al., 1985, Raviteja & Harihar, 2018) (Table 1). An average 2 mg/kg (1 mg/lb) ketamine, which is lower than the anaesthetic dose, is needed to induce around 5-10 minutes of dissociative effects. (Mihaljević et al., 2020, Short et al., 2018)

Blood pressure, pulse, breathing, electrocardiogram, and oxygen saturation should be monitored while ketamine is being administered. Neuropsychiatric function requires monitoring, and a patient must be at baseline in his/her pre morbid self before discharge.

Table 1: Case report with use of ketamine as an abreactant agent

Study	Ketamine dose	Findings
(Golechha et al. 1985) Case reports	0.5 to 1.5 mg/kg IM	Useful in diagnostic/ therapeutic purpose
(Raviteja & Harihar, 2018)- Case Report	1mg/kg IM	Useful in therapeutic purpose

The most common adverse drug reactions associated with ketamine are nausea, vomiting, dizziness, and diplopia. Sometimes, it can even lead to confusion, delirium, seizures, and hallucinations. Ketamine can cause a rise in systolic blood pressure and nausea however these effects are short-lived (Short et al., 2018).

There are limited studies regarding number of sessions, dosage to be used and route of administration for its use in abreaction.

CONCLUSION

Given that only a single session of abreaction was conducted, it was successful in meeting the objective of identifying the underlying stressor; it is premature to assert the superiority of this agent over others commonly used in abreaction therapy.

Ethical Considerations: Does this study include human subjects? No

Conflict of interest: No conflict of interest

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