



PRIMUM NON NOCERE

Ketamine-Assisted Psychotherapy:

History, Clinical Uses, and Case Example

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Origins and Medical Evolution of Ketamine

Ketamine was developed by Parke-Davis Laboratories in 1962 as a dissociative anesthetic for surgical applications.¹ It was investigated as a safer alternative to phencyclidine (PCP), which had a high incidence of emergence delirium that made it undesirable for human use. Ketamine provided effective dissociation with a more tolerable side effect profile. It included analgesic benefits through action on mu-opioid receptors, without the same degree of respiratory depression seen in opioid-class medications. Its primary mechanism involves NMDA receptor antagonism, which contributes to its analgesic, dissociative, and antidepressant effects.

Early Use and FDA Approval

The first human administration was in 1964. Ketamine was FDA-approved for human use in 1970. Ketamine was used experimentally during the Vietnam War by military surgeons for short-duration anesthesia procedures like orthopedic injuries, rapid wound debridement, management of burns, and painful changing of dressings. It was appealing due to its provision of safe anesthesia without respiratory depression, which is suitable for use in field hospitals with limited ventilation equipment. The psychological side effects of vivid dreams and hallucinations limited adoption and often led to coadministration with a benzodiazepine. A quiet and calm environment was preferred for recovery post-procedure.

Adoption in Military and Civilian Medicine

Ketamine began to be utilized in austere environments in the 1970s and 80s. In the 2000s and onwards, ketamine became part of the Tactical Combat Casualty Care (TCCC) protocol in the post-Vietnam era. All combat medics now carry it; it is routinely stocked on MEDEVAC helicopters and central to anesthesia and analgesia management strategies.

Interestingly, a study of American troops with burn injuries concluded that ketamine may decrease the prevalence of PTSD due to better pain management, neuronal protection, and NDMA receptor antagonism.^{2,3}

The military use of ketamine significantly influenced civilian emergency medical service and trauma center protocols. Ketamine is now a part of the standard civilian paramedic toolkit. It is also commonly used in operating rooms and emergency departments. It is widely used in pain management, sedation of agitated or combative patients, rapid sequence induction (RSI), and procedural sedation.⁴

Integration into Psychotherapy and Mental Health

International and VA Applications

Ketamine has been paired with psychotherapy throughout its history. In the 1990s, ketamine-assisted treatment for heroin addiction became documented in Russia.⁵ In the 2010s, the Veterans Administration began to publish on ketamine-assisted psychotherapy for behavioral health of the service-members and veterans.⁶

The VA currently uses an infusion protocol for treatment-resistant depression and severe suicidal ideation.⁷ Research continues to this day, particularly for treatment-resistant depression.

Clinical Experience and Case Application

I have provided ketamine-assisted psychotherapy to several dozen patients in my professional experience. I have found the treatment to be effective for cases of treatment-resistant depression and a suitable alternative to daily antidepressant agents. The experiential therapy aspect brings unique value beyond traditional medication. I have great appreciation for the therapeutic alliance formed between the patient and the doctor who is facilitating their experiential treatment. I received training in ketamine-assisted psychotherapy through supervision by a medical doctor and psychologist during my residency over several years, as well as a year-long hybrid and experiential course with the Integrative Psychiatry Institute.

Case Example

Ketamine-assisted psychotherapy matters because it affords relief to chronic suffering of the mind in a unique manner. I worked with a gender-queer patient in their 30s who grew up in an abusive family environment, endured ritual abuse, and had trauma from exposure to heavy illicit drug use by their parents. They identified as Autistic and had a history of self-harm, including hospitalization for self-mutilation and depressive episodes. Their history included several periods of psychotic features that remitted.

Due to the complexity of their history, I approached this case with substantial supervision and mentorship. I began with several months of weekly psychological counseling to build a strong therapeutic alliance and assess their readiness for ketamine-assisted psychotherapy. The individual expressed a deep desire to overcome social anxiety, which they described as primarily manifesting through “masking”—the exhausting act of modulating their tone, appearance, and behavior to conform socially.

Throughout our sessions, I supervised the stability of their personal and professional life and consistently evaluated their commitment to self-examination. Once we established a solid foundation, I facilitated three in-person ketamine-assisted psychotherapy sessions. Dosing was at 1.6 mg/kg intramuscularly administered by an RN under orders of an MD. The patient reported profound encounters with deep aspects of their psyche that supported greater comfort around self-identity. A theme reported by the patient was greater integration of their emotions. They remarked that they were more able to contemplate their difficulties after the KAP sessions. They reported greater happiness, less depression, and enhanced ability to work through mood challenges.

The patient was supported through the worsening of sleep acutely as dreams contained references to the recent loss of their brother. Lavela (lavender extract) was offered as a sleep aid, but was declined by the patient. The grief subsided after several weeks, and sleep normalized.

Integration and Stabilization

After each session, reflection questionnaires instructed the patient to journal about what they experienced and what it meant to them. At the end of the three in-person session series, a journaling exercise on self-directed values was performed to help generate further insight.

Treatment continued through physician-supervised home ketamine-assisted psychotherapy utilizing a lozenge-based patient-administered treatment session with a telemedicine integration session protocol. The patient participated in three sessions in this manner. The patient stabilized with a higher level of function in their personal and professional life and exited treatment.

Legal and Regulatory Landscape

Ketamine is the only nationally legal medication that is suitable for psychedelic-assisted therapy in the United States. Ketamine is a Schedule II controlled substance per DEA regulations in the United States and is similarly controlled around the world through international conventions.

Prescriptive Authority by State

In Washington state, ketamine can be prescribed by medical doctors and nurse practitioners. As a naturopathic physician, I can collaborate with a prescribing physician to utilize this treatment for my patient care. Patients must self-administer the treatment via a lozenge under my guidance. In group care models, I would collaborate with a medical doctor or a nurse who would administer the medication to the patient via intramuscular injection.

In Oregon, naturopathic physicians can prescribe ketamine due to a difference in their prescriptive scope. I believe the naturopathic board in Washington state should pursue legislative advancement to expand our prescriptive rights and treatment capabilities.

Conclusion

Ketamine-assisted psychotherapy is a powerful adjunctive psychiatric treatment. It requires a collaborative approach in most states due to the prescriptive scope of NDs. There is a long history of ketamine providing pain reduction and a shorter history of use in psychiatry. Positive clinical results were obtained in this case of trauma with depressive features.



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