



Ketamine Assisted Psychotherapy (KAP) Information

This document contains important information about ketamine.

Ketamine Assisted Psychotherapy (KAP)

provided at Canberra Psychology Services supported by Rainbow Mandala Therapies.

What is Ketamine?

Ketamine is a dissociative anaesthetic medication commonly used for anaesthesia and pain relief. Initially approved in the 1970s, it has become a prominent drug in hospitals and medical centres due to its fast-acting, safe, and short-lived effects.

Recently, it has been increasingly used in lower doses as an off-label therapy for chronic mental health conditions that are resistant to treatment, including depression, alcoholism, substance dependencies, post-traumatic stress disorder, and obsessive-compulsive disorder.

Despite its medical uses, ketamine has also gained notoriety as a club or party drug due to its non-medical and recreational use, which began in the late 1970s. However, its misuse can result in addiction, psychosis, and other adverse effects. As with any medication, it is crucial to use it only under the guidance of a qualified healthcare professional.

How Ketamine Works

As mentioned, ketamine is classified as a dissociative anesthetic, where "dissociation" means a sense of disconnection between mind and body, and from one's ordinary reality and usual sense of self.

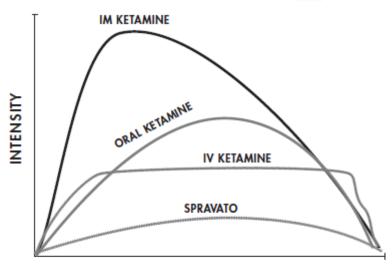
The present understanding of ketamine's mode of action is as an NMDA antagonist working through the glutamate neurotransmitter system. (This is a different pathway than that of other psychiatric drugs such as SSRIs, SNRIs, lamotrigine, antipsychotics, benzodiazepines, etc.)

In depression, the spindly receptors on neurons that facilitate signal transmission may recede, and the amygdala and hippocampus (both of which help govern mood) may shrink. Animal research has shown that ketamine can stimulate neural growth within days (and sometimes hours). One hypothesis is that there is a similar action in humans.

Another hypothesis is that ketamine affords a reprieve from habitual patterns of thought that underlie mood and behaviour, thereby creating an opportunity for learning new and healthier patterns of thought.

Dosing Strategies and Route of Administration

Ketamine can be administered in a variety of ways, including as an intravenous infusion (IV), intramuscular injection (IM), a subcutaneous injection (SC), intranasally, or sublingually/orally as a dissolving troche or tablet. Routes vary in the onset, bioavailability and duration of active effects for each person. IV and IM tend to be used to deliver a higher dose, and the oral method, as currently delivered at Canberra Psychology Services, tends to deliver a lower dose.



TIME

	IV Ketamine Clinics	Intranasal Ketamine (Spravato)	Ketamine-Assisted Psychotherapy
Typical frequency of stacking for severe depression	6 IV infusions of ketamine within 2–3 weeks	Twice per week for 4 weeks	6 Exploration sessions within 3-8 weeks
Psychotherapy (Preparation and Integration sessions)	No	No	Yes
Effects Typically Last	Approximately 1 month	Approximately 1 week	Approximately 3–4 months
Typical Maintenance Dosing	1 IV infusion per month	1 intranasal dose every 1–2 weeks	1 maintenance exploration session every 2–12 months
Taken with Concurrent Prescription Antidepressant	Not required	Required	Not required

Differing effects of high and low doses

Though experiences of ketamine vary greatly, it is generally thought that lower doses provide empathogen-like (heart-opening) responses, while higher doses create dissociative, psychedelic, out-of-body, ego-dissolving peak responses.

Research has demonstrated an antidepressant response at both high and low doses, however, at low doses the effect tends to be cumulative, requiring repeated administrations over short periods (weekly for 3-6 weeks). Some practitioners view the psychedelic and dissociative experiences that occur at higher doses to provide a more robust and longer-lasting outcome.

At Canberra Psychology Services, ketamine is currently administered in association with Rainbow Mandala Therapies by sublingual (oral) dissolving tablets, a lower-dose strategy that may allow for psychotherapy during the treatment, and an easier experience for those who are hesitant about injections.





We are also preparing to administer ketamine by:

- Intramuscular injection (IM), given in the shoulder or hip, delivers a highly bioavailable amount of medicine and a rapid onset.
- IM can provide the same dose used in sublingual administration, or a higher dose that creates a more dissociative experience.

The choice of dose and route of administration also depends on multiple factors, including client preference, therapeutic goals, prior exposure to ketamine and other psychedelics, body height and weight, and sensitivity.

Those without prior experience of non-ordinary states are advised to begin with lower doses to reduce anxiety and build familiarity with ketamine's effects, while those who are experienced with psychedelics may begin with higher initial doses. The dose and route of administration are ultimately decided by the medical provider, the Consultant Psychiatrist in Rainbow Mandala Therapies, who will discuss the plan with the client before the session after a comprehensive psychiatric assessment is completed and clinical informed consent procedures and documents are finalised.

The Ketamine Experience

The ketamine experience is characterised by the relaxation of ordinary concerns and the usual mindset, all while maintaining conscious awareness. This tends to lead to a disruption of negative feelings and preoccupations. Some ketamine providers feel that this interruption—and the exploration of other possible states of consciousness—can lead to significant shifts in overall well-being.

Lower Doses

At lower doses, you will most likely experience mild anesthetic, anxiolytic, antidepressant, and psychoactive effects. You might experience increased sensitivity to light and sound, as well as an altered sense of time. Some people experience empathogenic (similar to MDMA) effects in this dose range. This state may also enhance participation in psychotherapy, as defenses are relaxed, yet communication with others is still possible.

Higher Doses

Higher doses are more likely to produce psychedelic, dissociative states that are largely internal journeys away from the external world. Body sensations are greatly diminished. Such journeys may provide a more robust treatment effect, often assisting in the resolution of existential concerns, accelerating psychological and (and possibly spiritual) growth, and promoting a positive change in outlook and character that we refer to as a *transformative* response.

Sensory effects of ketamine may include distorted visualisation of colours, feeling suspended in space or floating, experiencing out-of-body sensations, vivid dreaming, and changes in visual, tactile and auditory processing. Synesthesia (a mingling of the senses) may occur. Familiar music may not be recognisable. An ordinary sense of time may morph into time dilation.





How Long Does It Last?

These effects typically start 5 to 10 minutes after ketamine dosing. The peak effects typically last 20 to 30 minutes, and then slowly diminish for the next hour. Some alterations in sensory perception, speech, and motor ability may continue for approximately 5 hours. Two to three hours after ketamine administration, clients can return home with another driver.

Driving an automobile or engaging in hazardous activities should not be undertaken on the day of the administration, and not until all effects have stopped.

Nurses from Rainbow Mandala Therapies will ensure that appropriate physical observations are monitored during the dosing sessions. These include measurement of heart rate, blood pressure, and the management of side effects such as nausea and hypertension which may require treatments with medications to help manage these rare events.

Why Ketamine Assisted Psychotherapy (KAP)?

The administration of ketamine is most effective when paired with psychotherapy. Canberra Psychology Services offers a psychotherapy program that will prepare you for your ketamine sessions, encourage you to explore your mind while within the ketamine space and assist you in integrating your experiences afterwards.

This program emphasises the potential for change, and such change is best facilitated within a structured, supportive psychotherapeutic environment with providers who are aware of your issues, hopes, desires, and struggles.

Ketamine has the potential to create a non-ordinary state of consciousness, facilitating a profound transpersonal or mystical peak experience. These sorts of peak experiences have been shown to expand one's sense of self and understanding of existence and may enable you to access your own healing wisdom. Your providers serve as guides and assist in processing the experience and its impact on your everyday life.

Ketamine's altered state can create conditions of relational and psychological **openness**, and thus we believe that trust in your providers enables the deepest possible work to occur. Psychotherapy sessions are meant to build that sense of connection and trust between you and your providers.

Many have found it beneficial to set an intention for the experience. Intentions should be personal and focused, which could include alterations in habits (such as the use of alcohol or cannabis, exercising, etc.), shifts in self-defeating patterns of thought or social interactions, or exploration of spiritual/existential realms. Our team will work with you to formulate your goals, and will also encourage you to hold those lightly, as resistance or attempts to control the experience can produce anxiety.

Your experience will be unique to you, and each of your sessions will be different. All such journeys are adventures that cannot be programmed. They evolve from your own being in relation to this medicine, and it is best to relax into the path as it unfolds. Many enjoy the journey, while others do not. Everyone comes through it, and often with greater insight into themselves and their lives. Our therapy program is designed to assist you in integrating these insights into your daily functioning.





As a byproduct of your experience, you may feel improvement in your emotional state and reduction in symptoms such as depression, anxiety, and post-traumatic manifestations. You may notice that you are a bit different after a ketamine experience, and that difference may feel liberating, allowing for new perspectives and behaviour.

These shifts may happen during treatment, in the aftermath, and/or in the days and weeks that follow. Some experiences may be temporarily disturbing to you, and we will work to help you understand these in the context of your healing process. Ultimately, we are working to assist you in changing patterns of mind, mood, and behavior that cause you difficulty and distress.

Both psychotherapy and medication are effective, but the combination has been shown to be much more powerful. Many come to us having attempted numerous treatments, and we want to ensure that you have the best possible outcome for your investment. This is a unique opportunity for growth and change, and so we encourage you to actively engage in the therapeutic process as well as the medication administration. You will be reviewed frequently by the clinicians from both Canberra Psychology Services and Rainbow Mandala Therapies to ensure integrated care of both your psychological and physical well-being.

When will I see positive effects and how long will they last?

Ketamine treatment can result in a number of benefits, and there are now many studies demonstrating its efficacy; however, it is still a relatively new and experimental psychiatric intervention, and there are no guarantees of your outcome.

Ketamine is distinguished from other psychotropic medications by its rapid onset, often producing relief in as soon as a few hours. The literature indicates a 70% initial response rate to ketamine, as well as a remission rate (return of symptoms) for people with treatment-resistant depression of 40-50%.

Durable improvement generally occurs with more than one administration and is most robust when part of an overall treatment program. It may not permanently relieve your condition. If your symptoms respond to ketamine, you may still elect to be treated with other medications and ongoing psychotherapy to reduce the possibility of relapse. Over time, you may also need additional ketamine booster administrations or other therapies to maintain your remission.

If you do not respond to ketamine after the first administration, repeated treatment will be offered. If you do not respond after a series of 6 dosing's, additional ketamine will not be offered. Studies have shown it is not effective to keep repeating ketamine in those who do not respond to the first doses.

Although a course of ketamine treatment typically provides only a few months of benefit, repeated treatments have been shown to have a cumulative effect, prolonging mood improvements, and current research is focused on how to sustain these benefits with an optimal dosing schedule and integration of psychotherapy.

This is an effective medicine, and it is even more so when you work with it to create positive changes in your life that can sustain your recovery.





Potential Risks of Ketamine

Ketamine has an extensive record of safety and has been used at much higher doses for surgical anesthesia, without respiratory depression. As with any other medication, there are also some potential risks and side effects to be informed of and consider.

The most common physical side effect is a short-term spike in blood pressure, pulse, or heart rate, which may be a risk to those with heart disease, and can be misinterpreted as a symptom of anxiety. For this reason, a nurse will always be on-site during any ketamine administration to check blood pressure and heart rate prior.

This is why Canberra Psychology Services partners with Rainbow Mandala Therapies to ensure psychiatric and nursing oversight of your care to check blood pressure and heart rate prior to and during administering Ketamine and to manage side effects like nausea and high blood pressure through administration of appropriate medications if required.

Other possibilities for side effects include dizziness/lightheadedness, sedation, impaired balance and coordination, slurred speech, mental confusion, excitability, diminished ability to see things that are present, diminished ability to hear or to feel objects accurately including one's own body, headache, anxiety, nausea, vomiting, and diminished awareness of physical functions such as respiration. These effects are transient and resolve as the active phase of the medication ends (generally within 4 hours). Rainbow Mandala Therapies staff use structured clinical tools to ensure assessment of all the known side effects of ketamine to ensure clinical safety during your treatment.

Repeated, high-dose, chronic use of ketamine has caused urinary tract symptoms and even permanent bladder dysfunction or cystitis in individuals abusing the drug. These adverse effects are much less likely in medically supervised ketamine treatment populations, but might include more frequent, painful, or difficult urination.

Please inform your providers immediately if you notice any of these side effects.

In terms of psychological risk, ketamine has been shown to worsen certain psychotic symptoms in people who suffer from schizophrenia or other serious mental disorders. It may also worsen underlying psychological problems in people with severe personality disorders and dissociative disorders.

We look forward to assisting you in accessing this novel treatment with the highest standards of medical, nursing and psychology care.