

## **KETAMINE ASSISTED PSYCHOTHERAPY INFORMATION**

Welcome to our practice! This document contains important information about our professional services regarding Ketamine Assisted Psychotherapy (KAP), as well as about ketamine itself.

Please read it carefully, and feel free to ask us any questions about the information it contains before you decide to participate in KAP. It is very important to us that you feel welcomed, safe, and respected, and to address any concerns you might have about the process.

### **What is Ketamine?**

Ketamine is a synthetic pharmaceutical compound, classified as a *dissociative anesthetic*. It is one of the most widely used drugs in modern medicine, and is on the World Health Organization's List of Essential Medicines. It was developed in 1963, FDA approved in 1970, and adopted by many hospitals and medical offices because of its rapid onset, proven safety, and short duration of action.

Ketamine is most commonly used in surgical settings, including pediatric surgery, due to its excellent safety profile, particularly around breathing/airway management. It has also been utilized successfully in managing acute and chronic pain conditions due to its *analgesic* properties.

In the last two decades, ketamine has been increasingly clinically applied at subanesthetic doses as an off-label treatment for various chronic treatment-resistant mental health conditions, such as depression, alcoholism, substance dependencies, post-traumatic stress disorder, obsessive compulsive disorder, and other psychiatric diagnoses.

Non-medical and recreational use of ketamine began in the late 1970s, leading to its cultural reputation as a club/party drug; it was also enthusiastically adopted by the psychedelic community and others who value exploration of altered states.

### **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 the 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 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 similar action in humans.

Another hypothesis is that ketamine affords a reprieve from habitual patterns of thought that underlie mood and behavior, thereby creating an opportunity for learning new and healthier patterns of thought. There is no current consensus on mode of action, and other mechanisms may be found central to ketamine's effects.

### **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.

Though research has demonstrated an antidepressant response to low doses that are minimally psychoactive or sub-psychedelic, this effect tends to be cumulative, requiring repeated administrations over short periods of time. Some practitioners view the psychedelic and dissociative experiences that occur at higher doses to provide a more robust and longer-lasting outcome.

Though experiences 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.

We use a range of dosing and route of administration (ROA) strategies to tailor a personalized approach for each client. In our practice, ketamine is administered by either:

- Sublingual (oral) dissolving tablets, a lower-dose strategy which may allow for psychotherapy during the treatment, and an easier experience for those who are hesitant about injections
- Intramuscular injection (IM), given in the shoulder or hip, which 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 experiences 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 is ultimately decided by the medical provider, who will discuss the plan with the client before the session.

### **The Ketamine Experience**

The ketamine experience is characterized by the relaxation of ordinary concerns and 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.

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 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 visualization of colors, 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 recognizable. An ordinary sense of time may morph into time dilation.

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.

### **Why Ketamine Assisted Psychotherapy (KAP)?**

The administration of ketamine may be most effective when paired with psychotherapy. We offer 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 emphasizes 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 that

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 behavior.

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 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 (including psychedelic medicines) are effective, but the combination has been shown to be much more powerful than either on its own. 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.

## **Our Treatment Process**

Our treatment team consists of a licensed clinical psychologist (who specializes in psychedelic integration) and a medical doctor (who has also completed a certificate in psychedelic-assisted psychotherapy). You will meet with us three times before your first ketamine administration. In some situations, your own psychotherapist may serve on the treatment team.

As a team, we will plan to assess and discuss if KAP is the right intervention for you at this time. We will also collaboratively decide on the most optimal arc for your treatment, including the number and frequency of ketamine and integration sessions, along with dosing and ROA suggestions.

In the first meeting, the psychologist will gather information from you about your current and past symptoms, previous treatment attempts, and relevant life history. (This meeting may be completed with your own therapist, if they will be a co-therapist during the ketamine dosing session).

In the second preparatory session, we will reflect on your goals for treatment and set intentions for your experience. We may also offer and teach breathing exercises

and other mindfulness meditation guidance in this session to address any anxiety you might have going into the experience.

The medical doctor will then meet with you to review your medical history, including past medical and psychiatric problems, current and recent medications, social history including your current substance use. We will collect vital signs include blood pressure, pulse, respiratory rate, and oxygen saturation.

The psychologist will also be present at this medical review; this team meeting is meant to build the sense of connection between you and your providers, as we believe that the efficacy of this medication is tremendously enhanced by safe settings in the context of trusting relationships.

If desired, we will collaboratively create an *invocation*, a set of emotionally evocative and relevant statements to be read to you as the ketamine is administered, which is meant to induce a growth-oriented mindset for your journey.

We will also discuss the use of music during the ketamine experience. People often find music helpful, as it grounds them and gives them something familiar to hold onto, and can potentially enhance or direct the experience.

We provide playlists designed to optimize your benefit from the journey, and we can also assist you in creating a playlist based on your own personalized preferences. (We suggest that you select novel music, as familiar songs may trigger previous patterns of thought that may no longer serve you, and that it not contain language you understand, as some find this overly suggestive or distracting.)

On the day of your ketamine administration, **it is very important** to follow the directions given on your [KAP Preparation and Aftercare Guide](#) about food and medication intake.

We will take some time when you arrive to discuss your current state and remind us all of your intentions for this work. We will also perform a disarming ceremony involving imagining armor that we may wear and making gestures to take off the armor.

We will wrap a blood pressure cuff on your arm and place a pulse oximeter on your finger. These will be used to take your vital signs during the session to assure that you stay safe.

For sublingual dosing, we will begin treatment with one lozenge of either 50 or 100mg. It will dissolve slowly, and as the ketamine is being absorbed through the

lining of your mouth, you will be asked not to swallow your saliva for at least 10 minutes. It is safe to swallow ketamine, although it may not be absorbed as well if you do so, resulting in less bioavailable medicine.

The first dose will give us a measure of your responsiveness to ketamine, and enable us to witness the effectiveness of the lozenges and adjust the dose if needed. Some people experience empathogenic (similar to MDMA) effects in this dose range, and engaging in therapeutic exploration can be quite fruitful. Others find speaking too difficult and prefer an internal focus even at this lower dose. Your preferences for engagement will be respected.

After 30 minutes, you will be offered a second dose (50 or 100 mg) which you will be asked to keep in your mouth for 10 minutes. Each sublingual dose provides a peak effect of approximately 20 minutes.

For intramuscular dosing, we will use a dose that we selected for you based on your height and weight, therapeutic goals, and other factors. We use doses that vary from 50mg to 150mg. This is a single injection, much like getting a vaccine. You may choose to have the injection in your upper arm or in the upper part of the buttocks. You will not have to undress for the injection, although you may have to pull your sleeve up or the waist of your pants down slightly.

The onset of the IM experience is generally swift, within a few minutes. You will be largely internally focused for the first 45 to 90 minutes, and remain under its influence at a lesser level for at least a subsequent hour.

Throughout the ketamine session, your providers will be present for support and to guide you through any recommended relaxation exercises, play soothing music, or read your personalized invocation if desired. During these sessions, you will be offered an eye mask to facilitate the and enhance the experience, and to help you maintain an internal focus. We recommend that you speak as little as possible while experiencing the active effects of this dose of ketamine, as it may be more beneficial for you to stay with the experience. You will have the opportunity to share once the effect of the medicine subsides.

We will reconnect with you (and potentially resume supportive psychotherapy) when you return from the most active phase of your journey, and are ready and willing to communicate with the outside world. The moments following an altered state can be exquisitely poignant and powerful in their ability to evoke and reshape how we attach to others, and your providers regard this opportunity with the importance it deserves.

You will be welcomed to share about your experience and discuss any insights or alternative perspectives that you discovered; however, some choose to contemplate their experience quietly and discuss at a later integration session. Whatever decision you make in these moments will be respected.

Following each of the ketamine administrations, you will need to stay in with us for at least two to three hours. After two hours, we will check on how you are metabolizing the medicine and if you are safe to return home; people can vary greatly in terms of how quickly the effects clear, so your departure time might vary.

Please arrange for some trusted person to pick you up and take you home. We cannot release you to a taxi or car share service (i.e. Uber/Lyft) driver, and we ask that you not drive at all on the day of your administration.

The medical doctor will call you on the following day to check on your health and well-being, and we will schedule a follow-up psychotherapy and integration session within one week of the ketamine dosing session. This may include both providers, or only one depending on prior arrangements.

### **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 8 dosings, 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. The treatment team will discuss with you other available options at that time.

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.

### **Monitoring Progress**

After our initial preparatory session, you will be enrolled in our electronic survey program. This system will send you several brief online measures of your symptoms and general functioning, which you will need to complete at least one day before your second meeting with the psychologist. We will review your scores at this meeting, and discuss any particular content it may have evoked for you.

While you are in treatment with us, this system will send you a brief (5 question) mood/pain/craving scale each day so we may track your responsiveness to treatment. Most of the initial measures will be repeated each month. We have found that these objective measures provide valuable perspective about the progress made in our work together.

### **Medical and Psychiatric Eligibility for KAP**

Before participating, you will be carefully interviewed to determine if you are a good candidate for ketamine treatment. This will include discussing your medical and psychiatric history, review of your medical and psychiatric records if necessary, and administration of brief psychological tests (as mentioned above).

You are required to be under the care of a primary care physician to evaluate your overall health, and in particular your respiratory and cardiovascular status. You are also required to be under the care of a mental health provider who refers you to our service and will continue your care after your ketamine treatment.

Some medical and psychiatric conditions need to be treated before you can safely take ketamine. These conditions include hallucinations, untreated mania, unstable angina (chest pain/heart disease), uncontrolled hyperthyroidism, increased intracranial pressure, evidence of liver disease, or a previously demonstrated allergy to ketamine.

An EKG may be required for those with a history of arrhythmia or a history of cardiovascular issues. Untreated or uncontrolled hypertension is a contraindication

to ketamine use as the substance causes a rise in blood pressure. This increase is typically comparable to normal increases in blood pressure that occur with heavy exercise.

Pregnant women and nursing mothers are not eligible because of undetermined potential effects on the fetus or nursing child.

Those with a history of cystitis or other bladder issues may need to be cleared by urological consultation, due to the rare but potentially significant adverse effect of cystitis.

Those with a primary psychotic or dissociative disorder or who are currently in a manic or mixed episode are not eligible for treatment with ketamine. Please consult your treating clinician if you are taking anxiety medications such as benzodiazepines, pregabalin, or gabapentin as they may blunt the antidepressant effects of ketamine. Opiates cannot be taken concurrently with ketamine therapy.

Information on ketamine's interaction with other medicines is only partially available; any possible interactions will be assessed to help determine your eligibility for ketamine treatment.

### **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.

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 actually 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).

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.

### **Management of Adverse Effects**

Our setting and our client instructions (see [KAP Preparation and Aftercare Guide](#) for details) are intended to minimize ketamine's adverse side effects as much as possible.

It is very important to abstain from eating or drinking in the 4 hours prior to your treatment so as to avoid nausea or vomiting. Additionally, due to possible blurred and altered vision, as well as impaired balance and coordination, you will be advised to lie still and keep your eyes closed or use the eye mask provided (as long as you are comfortable doing so) until the main effects have worn off.

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. You will be assessed for safety prior to leaving the office premises, and will be required to arrange for a responsible person drive you home from the administrations.

Our MD will check your vital signs before and after the administration, and be present throughout the session to monitor and treat any side effects. We will additionally reassure you prior to administration that the increase in heart rate is transient and due only to the effects of the medication, and not to anxiety or panic, nor any serious health condition.

The treating MD reserves the right to activate emergency response systems (such as calling 9-1-1) if it is determined by clinical judgment that your safety requires a higher level of care than can be provided in our setting.

Some people report the psychic experiences as bizarre or frightening, while others describe them as pleasurable, joyful, or fascinating. We have found that even frightening experiences can be of paramount value to your transition to recovery from the suffering that brought you to your KAP work. Our team is trained in providing stability for those experiencing extreme states, and you will receive psychotherapeutic help and ongoing guidance as to how to make the best use of these experiences.

## **Potential for Ketamine Abuse and Physical Dependence**

Ketamine belongs to the same group of chemicals as phencyclidine (Sernyl, PCP, "Angel dust"). This group of chemical compounds is known chemically as arylcyclohexylamines and are classified as hallucinogens (also known as psychedelics). Ketamine is a controlled substance and is subject to Schedule III rules under the Controlled Substance Act of 1970. Medical evidence regarding the issue of drug abuse and dependence suggests that ketamine's abuse potential is equivalent to that of phencyclidine and other hallucinogenic substances.

Phencyclidine and other hallucinogenic compounds do not meet criteria for chemical dependence, since they do not cause tolerance and withdrawal symptoms. However, cravings have been reported by individuals with the history of heavy use of psychedelic drugs. In addition, ketamine can have effects on mood (feelings), cognition (thinking), and perception (imagery) that may make some people want to use it repeatedly.

Therefore, ketamine should never be used except under the direct supervision of a licensed physician. We have not had clients become dependent on ketamine.

## **Alternative Procedures and Treatments**

Psychotherapy without ketamine is available and can be effective. Major Depression (MDD), PTSD and Bipolar Disorders are usually treated with antidepressant medications, tranquilizers, mood stabilizers and psychotherapy. PTSD is often also treated with Eye Movement Desensitization and Reprocessing (EMDR). Electroconvulsive therapy (ECT), and the recently introduced Transcranial Magnetic Stimulation (TMS) are also in use for treatment-resistant-depression.

## **Voluntary Nature of Participation**

Your decision to undertake KAP is completely voluntary. Once you indicate that you have understood the benefits and risks of this treatment, you will be asked to sign the Informed Consent Agreement at your first visit in order to participate.

You may ask us any questions you may have concerning the procedure or effects of ketamine at any time. Your consent to receive ketamine may be withdrawn by you, and you may discontinue your participation, at any time up until the actual injection or lozenge has been given.

*By signing the Informed Consent for Ketamine Assisted Psychotherapy, you indicate that you understand the information provided, that any questions or concerns you*

*have regarding our services or this agreement have been answered and resolved, and that you give your consent to the therapeutic procedures to be performed during your participation in KAP.*

**Thank you for taking the time to read this important information!**