

## ***Information for Your Understanding of the Ketamine Assisted Therapy (KAT) Process***

### **Introduction**

Ketamine is an off label\* treatment for various chronic treatment resistant mental health conditions. It was developed in 1962 and was first used for American soldiers injured in Vietnam. Since the 1970s ketamine has been used safely at much higher doses as an anesthetic and analgesic agent. Currently it being used clinically and in research as an effective treatment for depression, alcoholism, substance use disorders, PTSD and other psychiatric diagnoses as well as for existential, psychological crisis and spiritual growth.

### **How Does It Work?**

The current theory 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, anti-psychotics, benzodiazepines, etc.

Ketamine is classified as a dissociative anesthetic, dissociation meaning a sense of disconnection from one's ordinary reality and usual self. At the much lower dosage level administered in KAP, one will most likely experience mild anesthetic, anxiolytic, antidepressant and, potentially, psychedelic effects.

While more recent work has demonstrated the possibility of an anti-depressant response to low dosages of ketamine administered in different routes such as intravenous (IV), intra muscular (IM), intra-nasal (IN) and sublingual (SL - under the tongue), this effect tends to be more sustained with repeated use—in other words, a cumulative effect.

No matter the route of administration, ketamine tends to produce dissociative effects in a broad range—almost none occurring in a session to strongly present—depending on dosage and one's susceptibility. The evidence supports that the 'dissociative' experiences may well be instrumental in providing a more robust effect. In the Trance state, these effects are deliberately reduced in intensity to enable therapy and direct communication. At higher but still sub-anesthetic doses, the dissociative effect predominates for a time, usually about a half hour to an hour.

Both methods tend to produce a positive change in outlook and character and relieve symptoms of depression, PTSD, anxiety, and other difficult states of mind and heart.

We employ sublingual for the first session and intramuscular methods for subsequent sessions.

Essential to both methods are time-outs from our ordinary state of mind, this period being of varying duration, usually 30 to 90 minutes, though it will seem timeless. Characteristically, there is a relaxation from ordinary concerns and usual mind, while maintaining conscious awareness of the flow of mind under the influence of ketamine. This tends to lead to a disruption of negative feelings and obsessional preoccupations.

This relief and the exploration and experience of other possible states of consciousness are uniquely impactful. As your Roots to Thrive Team, we act as guides to the experience, preparing you for it and facilitating your process. For most people, KAT is singularly beneficial.

### **Support for Ongoing Treatment**

You will be supported within the RTT program and by the therapeutic team throughout the whole process.

### **How Long Will It Take Before I Might See Beneficial Effects?**

You may experience important positive changes in personality, mood and cognition during the first session and continuing days and weeks to follow.

The ketamine experience itself is designed to enable your own healing wisdom to be accessed and beneficial to you. The therapy support you will receive will aid you in making your experience(s) valuable and understandable to you. We will endeavor to assist you in changing patterns of mind and behavior that are of concern and cause you difficulty.

### **Why Ketamine Assisted Psychotherapy?**

The purpose of the **ketamine experience** is to create a non-ordinary (“altered”) state of consciousness in order to facilitate profound transpersonal (“transcendental”, “mystical”, “spiritual”, “religious”) peak experiences. These may prove to be helpful in resolving your existential problems, accelerating your psycho-spiritual growth and leading to a deep personal transformation and optimization of your lifestyle. Such change is best facilitated within a structured supportive therapeutic milieu in connection with therapists who have a view of your issues, hopes, desires, and struggles. As a byproduct of your experience you may well feel improvement in your emotional state and reduction in symptoms that bother you such as depression, anxiety, and post-traumatic manifestations.

You may well notice that you are a bit different after a ketamine experience and that difference may well be liberating and allow for new mindfulness and new behavior. One often leaves this experience enlightened, humbled, inspired and much more deeply connected to the natural ecology that embraces us.

## **The Ketamine Sessions:**

The first session is with lozenges to assess your responsiveness to ketamine. This enables us to make a decision about the effectiveness of the lozenge and to adjust the dose for the 2nd session with IM ketamine.

The second and third sessions will be with an IM injection based on your sensitivity. We will discuss fully this dose prior to administration.

For some individuals, only the lozenge experience may be utilized as this is sufficient for effect.

We suggest participants undergoing the RTT program with KAT make a commitment for the full three sessions as a minimum exposure to this method of employing ketamine. This allows for familiarization with this potent experience and the amplification of its benefits.

Your experience will be unique to you. We cannot pre-program your experience. All KAT journeys are adventures that cannot be programmed. They evolve from your own being in relation to this substance. Journeys vary in intensity from the sublingual lozenge trances to the IM experiences. While it is best to form an intention for your session, you may or may not be able to hold onto that. Indeed, no holding on is best and the journey will flow whether or not you hold on and resist, or follow the path that unfolds and you relax into it. Holding on is the main source of anxiety in this and other related journeys. A ketamine session can be light, dark, or both. There will be concepts, visions, encounters, and you may well deal with your own death, mortality, and immortality. Most journeys are enjoyable and all are filled with awe. Invariably you will discover a new sense of who you are and what is important to you. You will have a time-out from suffering and an opportunity to change your view.

## **Eligibility for ketamine treatment**

Before participating in ketamine session, you will be carefully interviewed to determine if you are eligible for ketamine therapy, including a medical history, a physical exam (only if deemed necessary), review of your medical/psychiatric records, a psychiatric history and administration of brief psychological tests to assess your state of mind.

Pregnant women and nursing mothers are **not** eligible because of potential effects on the fetus, or nursing child. The effects of ketamine on pregnancy and the fetus are undetermined, and therefore, it is advisable to protect against pregnancy while exposing yourself to ketamine or in the immediate aftermath of its use.

Untreated hypertension is a contraindication to ketamine use as the substance causes a rise in BP. Similarly, a history of heart disease may make you ineligible to participate.

Information on ketamine's interaction with other medicines is only partially available and it will be assessed as to your eligibility for KAP. Most psychiatric medications are compatible with KAP.

Ketamine should not be taken if you have untreated hyperthyroidism. There have also been reports of some decrease in immune function in patients receiving **surgical** doses of ketamine.

Ketamine has an extensive record of safety and has been used at much higher doses for surgical anesthesia, without respiratory depression.

Bladder dysfunction or irritability has occurred in recreational users of ketamine at very high and repeated doses. In clinical practice this occurs rarely.

### **Alternative procedures and possibilities**

No other procedure is available in medicine that produces ketamine's effects. Major Depression (MDD), PTSD and Bipolar Disorders are usually treated with anti-depressant medications, tranquilizers, mood stabilizers and psychotherapy. Electroconvulsive therapy (ECT), and the recently introduced Transcranial Magnetic Stimulation (TMS) are also in use for treatment-resistant-depression. Ketamine has also been used in the treatment of addictions and alcoholism as part of comprehensive and usually residential treatment programs, primarily abroad.

### **Confidentiality**

Your privacy and all therapy records will be kept confidential. They will be maintained with the same precautions as ordinary medical records. To allow others access to your records, you will have to provide a signed release form.

### **Voluntary nature of participation**

Please be aware that Health Canada has not yet established the appropriateness of Ketamine Assisted Therapy and its use is considered off-label\*, the only official indication for use of ketamine being anesthesia. **Your awareness of this situation is key to understanding any liability associated with your use of ketamine. Your signed informed consent indicates you are aware of this situation.**

Ketamine is a relatively new psychiatric treatment—the primary studies have been with depression, bipolar disorders and alcoholism. It is moving towards becoming a mainstream treatment.

There are an expanding array of ketamine clinics across North America, primarily administering ketamine intravenously, and usually without a therapy component—in other words, as a drug. That therapeutic effect generally occurs with more than one treat-

ment and is most robust when part of an overall treatment program. It may not permanently relieve depression. If your symptoms respond positively to Ketamine Assisted Therapy, you may still elect to be treated with medications and ongoing therapy to try to reduce the possibility of relapse.

Your decision to undertake Ketamine Assisted Therapy is completely voluntary. Before you make your decision about participating in KAT, you may ask and will be encouraged to ask—any questions you may have about the process.

**Withdrawal from KAT is always your option.**

Even after agreeing to undertake Ketamine Assisted Therapy, you may decide to withdraw from the program at any time.

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\* A drug may be useful for other indications as well as the approved ones, but a manufacturer may choose not to apply for an indication if there is unlikely to be a good return on investment, as seeking approval for a medication can be costly and time-consuming. One example of this is an older drug that no longer has patent protection that could be used for another treatment in a very small population of patients. In this case, there is little financial incentive for the manufacturer to apply to Health Canada for new marketable indications.

Clinicians, however, may prescribe for off-label indications. An authorized indication provides the safety net of a Health Canada review. However, other indications may have just as much scientific evidence behind them, yet their manufacturers have not submitted this to Health Canada. (Source: CADTH)

Adapted from: The Orenda Institute, The Ketamine Papers (Dr. Phil Wolfson), Dr. Lucinda Grande, Dr. Scott Shannon, KRIYA