

KETAMINE 101 FOR THERAPISTS

By Clary Tepper, PhD
and Eric Tepper, MD



WHAT IS KETAMINE, ANYWAY?

Ketamine was originally developed over 50 years ago as an anesthetic (it is still widely used as an anesthetic today). Researchers at Yale University in the 1990s discovered that ketamine also treated mental health conditions. Decades of research followed, and today, ketamine is a well-accepted mental health treatment.





WHAT IS ESKETAMINE?

Simply put, esketamine is a type of ketamine, and it is administered as a nose spray. Esketamine is also commonly called Spravato (its brand name).

Technically speaking, here is the difference between ketamine and esketamine: ketamine is a compound consisting of two isomers (both the "s" and the "r" isomer), while esketamine consists of only one isomer (the "s"). Both ketamine and esketamine are effective for treating mental health conditions.



WHAT MENTAL HEALTH CONDITIONS DO KETAMINE AND ESKETAMINE TREAT?

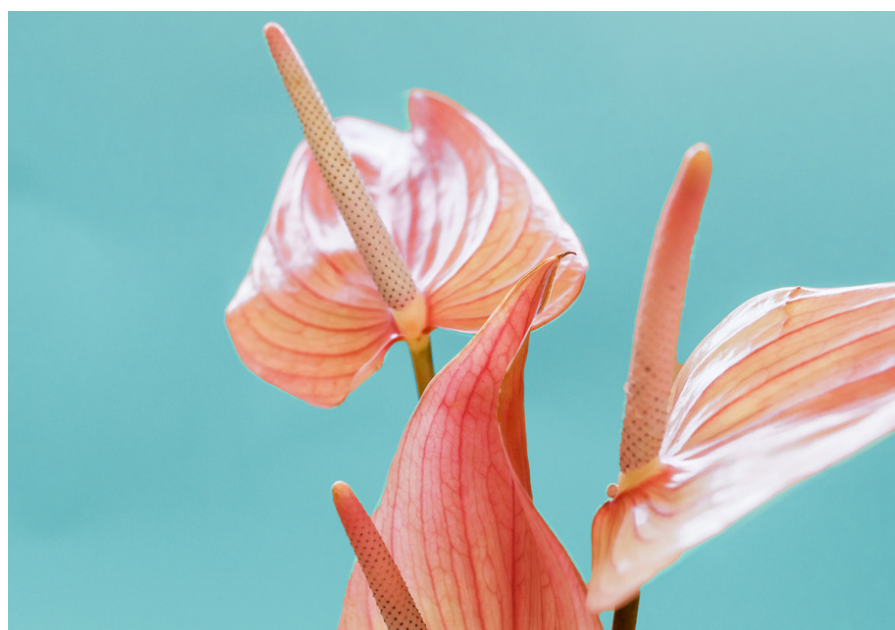
- Unipolar depression
- Bipolar depression
- Anxiety disorders
- Suicidality
- OCD
- PTSD

Ketamine and esketamine are not helpful for schizophrenia and other thought disorders

ARE KETAMINE AND ESKETAMINE SAFE MEDICATIONS?



Over 50 years of data (gathered from ketamine's use as an anesthetic) has shown that ketamine is very safe when administered in a medical setting by a medical professional after a comprehensive medical evaluation. The doses used for treating mental health conditions are much lower than the doses used for anesthesia.



Esketamine (Spravato) is derived from ketamine, so it has a similar safety profile. Esketamine can only be given in a REMS-certified medical setting.

People with certain medical conditions cannot safely take ketamine, which is why a medical evaluation is always required.

HOW ARE KETAMINE AND ESKETAMINE ADMINISTERED?



- Ketamine can be given as either 1) a simple shot, or 2) via an IV
- Esketamine, also called Spravato, is administered in the form of a nose spray
- Although ketamine can be compounded into an oral form (a “troche”), the bioavailability of oral ketamine is much lower than the bioavailability of other forms of ketamine (bioavailability refers to the amount of medicine that actually enters the bloodstream)

SO KETAMINE IS NOT A DAILY PILL THAT MY CLIENTS TAKE AT HOME?

No, both ketamine and esketamine are administered in a medical setting under the supervision of a licensed medical provider. During Covid, rules were relaxed, allowing people to take oral ketamine (but not other forms of ketamine) at home. Unfortunately, that practice resulted in medical complications and both misuse and abuse of the medication. Accordingly, both the American Psychiatric Association and the American Association of Ketamine Physicians explicitly say that ketamine should only be prescribed and administered in a medical setting under the supervision of a licensed medical provider.



WHAT ARE THE SIDE EFFECTS OF KETAMINE/ESKETAMINE?

The side effects of both ketamine and esketamine are limited in nature—they occur during the administration of the medicine and wear off within an hour or two. They include: a feeling of dissociation, a temporary bump up in blood pressure, and if the patient has eaten recently, nausea is possible. Although most of the side effects wear off quickly, coordination can be affected for a number of hours afterwards, so people need to have someone drive them home from the appointment.



HOW LONG IS THE COURSE OF TREATMENT?

The protocol developed at Yale is six doses, given over the course of two to three weeks, with each dose being given at least a day apart from the last. People generally start to feel better after the first dose, with the strongest effect seen after the fourth or fifth dose. Sometimes people find a booster dose in the future to be helpful in maintaining the effect.

As each person is an individual, the course of treatment (including the amount of medication given) should be tailored to them based upon their individual response.



HOW EFFECTIVE ARE KETAMINE AND ESKETAMINE? HOW LONG DO THEY TAKE TO WORK?

There are now hundreds of studies on the effectiveness of ketamine and esketamine, and due to methodological differences between studies, outcomes vary. Generally speaking, studies show that 65% to 90% of patients who do a course of ketamine or esketamine get better.

Both ketamine and esketamine work fast. Many patients feel better after just one treatment.





HOW IS KETAMINE DIFFERENT FROM TRADITIONAL ANTIDEPRESSANTS?

Traditional antidepressants (SSRIs) operate on the serotonin hypothesis: if we increase the neurotransmitter called serotonin in the brain, people will feel better. Ketamine and esketamine increase glutamate (a different neurotransmitter) in the brain.

Ketamine and esketamine also differ from SSRIs in how quickly they work. SSRIs take months to reach full effectiveness, while both ketamine and esketamine start to work after only one dose.



WHAT IF MY CLIENTS ARE TAKING OTHER MENTAL HEALTH MEDICATIONS?



Most other medications are fine in conjunction with ketamine and esketamine. There are a few medications (e.g., lamictal) where the dose may need to be temporary adjusted so it does not blunt the effectiveness of the ketamine.

WHO IS A CANDIDATE FOR KETAMINE OR ESKETAMINE?

There is where ketamine and esketamine are different.

KETAMINE: Patients with mental health symptoms who do not have any medical contraindications can take ketamine.

ESKETAMINE: To qualify for esketamine (Spravato), clients need to have tried two different antidepressant medications that failed to result in full remission of symptoms (this is what technically makes the client have "treatment-resistant depression"). This is not the case for regular ketamine. The one exception to this rule for esketamine (Spravato) is that a patient who is acutely suicidal may take it without trying other medications first.



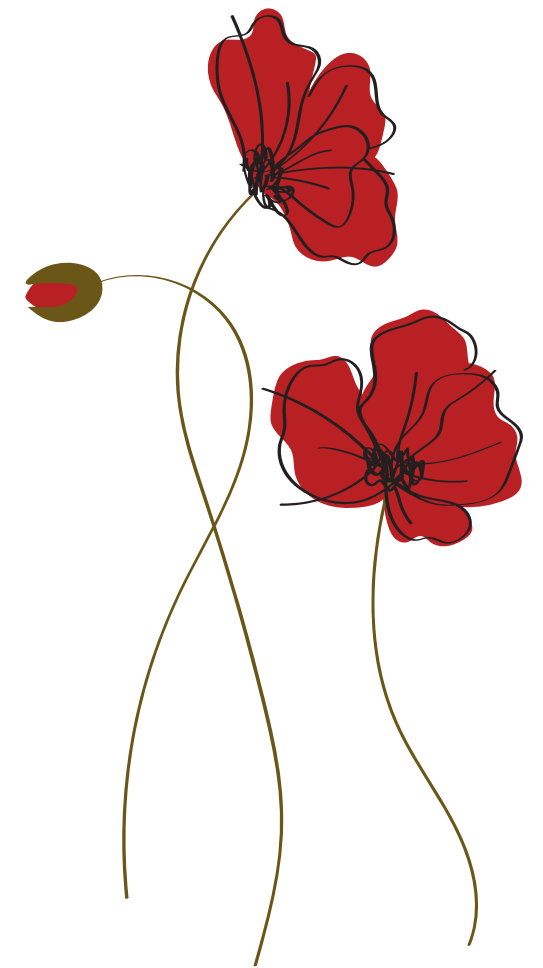
WHAT ROLE DOES THERAPY PLAY IN KETAMINE AND ESKETAMINE TREATMENT?

Studies agree that psychotherapy makes a significant difference in increasing the effectiveness of both ketamine and esketamine. Neural growth starts in a matter of hours after receiving a dose of ketamine or esketamine, and when psychotherapy takes place within the following 48 hours, more neural growth is seen. This increased neural growth enhances the effectiveness of the medicine, resulting in more robust, positive effects. Accordingly, ketamine or esketamine should be used in conjunction with therapy, it should not be used instead of therapy.



WHAT SHOULD I LOOK FOR WHEN REFERRING MY CLIENT FOR KETAMINE OR ESKETAMINE?

Beyond the obvious (a setting with a licensed medical provider), look for a clinic that offers both ketamine and esketamine. That way, if your client is offered one and not the other, you can feel confident that was a medical decision and not a decision of convenience and/or financial gain for the clinic. Given that the bioavailability of oral ketamine ("troches") is so much lower than other forms of ketamine, look for settings that offer the more bioavailable forms. More bioavailable forms include: 1) a shot, also called IM for intramuscular; 2) IV ketamine (also called an infusion), and 3) the nose spray called Spravato (esketamine). You also want to make sure all the treatment rooms are private—having other patients in the room during the treatment changes the experience for the patient (usually in a negative way). The setting influences the kind of experience patients have while experiencing the effects of ketamine, so a peaceful setting is important and will contribute to a more positive outcome.



WHO WE ARE: CATALYST INTEGRATION FOR HEALTH IN SACRAMENTO, CALIFORNIA

Catalyst Integration for Health was founded by Eric Tepper, MD, who was one of the first providers to offer ketamine and esketamine in the Sacramento area. In addition to his clinical practice, he travels around the country training other physicians in appropriate uses of ketamine for treating mental health conditions.

www.mybraincatalyst.com 916.850.2299

