How Does It Feel to Get Ketamine Therapy?

G gizmodo.com/how-does-it-feel-to-get-ketamine-therapy-1846045894

Daniel Kolitz January 18, 2021



Illustration: Benjamin Currie/Gizmodo

Among the recreational drugs currently entering the psychiatric mainstream (MDMA, LSD, etc.), ketamine is something of an outlier. Most people have a rough idea of what "acid" or "molly" are supposed to do, even if they've never tried them. Ketamine, meanwhile, remains —outside of a committed sect—an enigma. It's not a very <u>popular</u> recreational drug. There is no standard Hollywood version of the ketamine trip. You hear talk of k-holes, and the occasional allusion to its use as a horse tranquilizer, but little on its actual effects, and less on what it's like to take it in a clinical setting, which more and more patients with depression and mood disorders will soon be doing. To correct the record, for this week's <u>Giz Asks</u> we reached out to a number of people who've conducted clinical ketamine trials.

Mikael Tiger

Researcher, Clinical Neuroscience, Karolinska Institutet

In one of my studies, we treated thirty depressed patients with ketamine.

During the treatment, most patients reported an intense dissociation. They were disconnected from reality in various ways, and perceived things differently. One patient felt the radio was playing in 3D, which she found intensely absorbing. Afterwards, returning to the same program, she realized it was actually quite dull.

About 20% of the patients had hallucinations, and the majority found the experience interesting; some likened it to being drunk. (Ketamine is addictive for this reason.) Two out of thirty thought it was a horrible experience, although since they responded to the treatment—they were willing to do it again. Overall, it was thought to be quite intense.

The drug was administered in a hospital setting, and nurses were present for the duration of the experience. These were nurses who'd worked extensively with severely depressed patients, and had helped administer ECT, which as a treatment is (in a sense) closer to ketamine therapy than are LSD or psilocybin therapy. With ECT, as with ketamine, the goal is to get the patient into what we call remission—to return them to their life before the onset of severe depression. That's distinct from, for example, psilocybin therapy, where the psychotherapy component is really important. With ketamine, people don't get insights that they can integrate into their day-to-day lives, as they might do with psychedelic therapy. They had a weird experience, but no insights.

After the treatment came the antidepressant effects. This is very new: most normal antidepressants take weeks before an effect is perceived. 70% of patients in our trial woke up the next morning feeling a lot better.

"Two out of thirty thought it was a horrible experience, although since they responded to the treatment—they were willing to do it again. Overall, it was thought to be quite intense."

Michael Grunebaum

Associate Professor, Psychiatry, Columbia University

The vast majority of patients with mood disorders who are treated with ketamine infusions report feeling weird and/or spacey. Some feel like they're floating. Some register their arms or legs as feeling different in some way—larger than usual, or numb, or harder to move. Some get a sort of numbness around their face or mouth. Sometimes people feel cold. A rare few experience mild hallucinations—shapes or colors on the walls or ceiling.

A small percentage of people may feel anxious when they're getting ketamine, possibly because the sensations aren't familiar; some people might find it harder to locate the right words, which can cause anxiety. A small minority also may feel sad, or get tearful, or experience a rush of memory. Conversely, a small percentage of patients experience a kind of euphoria. But more often, what most experience is that weirdness/spaciness. Typically, all of these effects go away after about 15-30 minutes after treatment.

Usually, the drug is delivered intravenously, in a slow drip over forty minutes, but a nasal spray version was recently approved. People might get two or three treatments a week for a few weeks, and then taper down in frequency. There's still a lot of research into what the right frequency is for maintenance treatment, as well as how long treatment should last for, how many is safe, etc. Studies of ketamine addiction demonstrate serious risks to long-term ketamine use, although therapeutic doses are much lower, perhaps a tenth as large as typical street doses.



"The vast majority of patients with mood disorders who are treated with ketamine infusions report feeling weird and/or spacey. Some feel like they're floating."

Adam Kaplin

Clinical Director of the Psychiatric Esketamine Clinic and Assistant Professor of Psychiatry and Behavioral Sciences at Johns Hopkins University

One patient of ours would, each time, turn the lights off and enter a dreamlike state, during which she'd fly over New York City, where she used to work. She looked forward to it—her little voyages to the city. Another woman swore we were hiding lemons in the room. We had a patient for whom colors outside the window would vibrate—he described a green unlike any green he'd seen before. Another heard voices and saw spiders crawling on the door.

Which is all to say that it runs a wide range, and depends for the most part on the patient. Virtually no one we dosed, though, said they didn't want to continue. When ketamine works, it works dramatically—in the first dose or two, people get dramatically better; some even feel they've returned to their old selves. To have this response in people with treatment-resistant depression, after just a few doses, is kind of amazing.

The people who were most distressed by it were people who'd never experimented with drugs before. One person we treated, a musician, had treated his body like a temple—no drugs or alcohol for his entire life. So for him, ketamine was a frightening experience: he just didn't know what was going to happen. But typically, people who have done drugs in the past find it to be a cool experience.

One thing that helped with side effects—and I swear I'm not getting any money for this —was Enya. Invariably, Enya soothed our patients, even patients who were hard rock partisans. It was Enya that really did it for them.

"The people who were most distressed by it were people who'd never experimented with drugs before."

Rebecca Price

Associate Professor, Psychiatry and Psychology, University of Pittsburgh

During and immediately after a ketamine infusion, most patients feel sedated, a bit "high" or euphoric, and some feel spaced out or a bit detached from what's going on around them. Some feel dizzy, nauseous, or get a headache. Researchers typically don't think there's anything too special about the acute experience of receiving ketamine. When ketamine therapy is successful, the "special" stuff comes downstream, in the form of an accumulating sense of relief from depression and other negative emotional symptoms, peaking about 24 hours after the infusion, which has been linked to neuroplasticity changes occurring at these later time points. We generally think of the things that happen during and right around the infusion as being mostly nuisance side effects, rather than anything particularly therapeutic. This makes ketamine quite distinct from other drugs now under investigation as psychiatric treatments, such as psilocybin.

"During and immediately after a ketamine infusion, most patients feel sedated, a bit 'high' or euphoric, and some feel spaced out or a bit detached from what's going on around them."

Joshua Berman

Assistant Professor of Psychiatry and Clinical Lead of the Ketamine Program at Columbia University

Patients report a range of experiences while getting ketamine therapy for depression, but in general, psychiatric dose ketamine is a "tamer" experience than many would imagine. Most patients describe feeling "spacey," starting from 5-15 minutes after the initial treatment, and that feeling tails off anywhere from 30-90 minutes in. Some do describe it as a high, and a small number of patients become slightly giddy. A few patients describe near-hallucinations such as seeing patterns around them. While almost all describe some sense of dissociation, very few feel truly outside their bodies and fewer still feel that they have lost touch with reality for even a short time. These feelings may intensify if higher doses are used, and there is not universal agreement among ketamine physicians as to whether a high degree of dissociation is required to achieve the desired antidepressant effect.

Ketamine is administered either via IV or via an intranasal inhaler in a medically controlled setting where vital signs and the patient's response can be monitored. Treatment sessions are typically two hours, after which the patient can go home.

The acute effects (feeling spacey, dissociated, or high) go away within one to two hours after administration, but any reduction in depressive symptoms may persist for hours to days. It may take several treatments for an antidepressant effect to consolidate and become longer lasting. Once fully established, the antidepressant effect can be made to persist with maintenance treatments which may be 2-4 weeks apart. For some patients, a long period of maintenance treatment is required while other patients have sustained remission after only a few months of maintenance.

Many patients report rapid improvement in mood, anxiety and hedonic function, which is what initially attracted the psychiatric profession to the use of ketamine. It is the first treatment for depression that has the potential to work in minutes to hours. But for many, the first one or two (or even four) treatments produce a much subtler feeling, with variable improvement in overall mood—it fluctuates, at first, but then consolidates. About a third of patients have either no response or no sustained response.

For most patients, the experience is either very pleasant or neutral but on occasion patients may briefly feel sad or tearful.

Ketamine treatment is different from the psychedelic guided therapies which are designed such that the altered states achieved produce therapeutic insights. The prevailing model for ketamine therapy is more like a physical treatment designed to enhance synaptic connections using mechanisms that work faster than those used by conventional antidepressants. That said, a few patients describe having insights or shifting perspective during ketamine treatments in ways that may contribute to their recovery from depression, and some therapists are exploring whether it can be used as an "ego dissolving" therapy enhancer as has been better established with MDMA and psilocybin.

"Ketamine is administered either via IV or via an intranasal inhaler in a medically controlled setting where vital signs and the patient's response can be monitored. Treatment sessions are typically two hours, after which the patient can go home."

Do you have a burning question for Giz Asks? Email us at tipbox@gizmodo.com.