



Ketamine: The Future of Depression Treatment?

By Matt McMillen

FROM THE WEBMD ARCHIVES 

Sept. 23, 2014 -- Every year, 13 million to 14 million Americans have major depression. Of those who seek treatment, 30% to 40% will not get better or fully recover with standard antidepressants.

That puts them at greater risk of alcohol and drug abuse, hospitalization, and suicide attempts. Now, though, a growing body of research shows there may be new hope: the anesthetic drug ketamine.

Ketamine has a reputation as an illicit party drug due to its hallucinogenic effects. But in a handful of ketamine clinics around the country, people who weren't helped by standard treatments are getting a series of infusions to ease their depression. The drug has also been used in emergency rooms for curbing suicidal thoughts, making it a potential lifesaver.

"The benefits I've seen are pretty impressive, and the data are very strong," says psychiatrist Kyle Lapidus, MD, PhD. He's an assistant professor of psychiatry and neuroscience at Stony Brook University. Lapidus says there have been a large number of positive studies, though the number of participants in those studies has been small.

Ketamine acts quickly -- often within hours or less -- and health care professionals who give it to patients at therapeutic doses say it has mild and brief side effects in most people. But it hasn't been thoroughly studied for long-term safety and effectiveness, and the FDA hasn't approved it to treat depression. "The pace of research can be slow for people who are suffering," Lapidus says.

He says it's not uncommon for doctors to go "off-label" (using a drug for a purpose other than its approved one) when treating patients. And in the case of ketamine, the research, including his own, has convinced him that it can help depressed patients. Lapidus runs a Manhattan clinic called US Ketamine. Soon, he will open a second clinic on Long Island.

'Not a Miracle Drug'

Experts don't know exactly how ketamine works, but they do know it works differently than commonly used antidepressants such as Prozac, Zoloft, and Effexor. That may explain



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Sources 
SOURCES:

Kyle Lapidus, MD, psychiatrist, assistant professor of psychiatry and neuroscience, Stony Brook University.

Alan Manevitz, MD, psychiatrist, Lenox Hill Hospital, New York.

Elizabeth Ballard, PhD, research fellow, NIMH.

Enrique Abreu, MD, anesthesiologist, Portland Ketamine Clinic, Portland, OR.

Agency for Healthcare Quality and Research: "Primary Care Depression Guidelines and Treatment Resistant Depression: Variations on an Important but Understudied Theme."

Ketamine Advocacy Network: "Directory of US ketamine doctors."

Larkin, G. *Injury Prevention*, 2010.

Purves, D. *Neuroscience*, 2nd edition, 2001.

Ballard, E. *Journal of Psychiatric Research*, August 2014.

DiazGranados, N. *Journal of Clinical Psychiatry*, December 2010.

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That's novel and exciting, says psychiatrist Alan Manevitz, MD. He specializes in treatment-resistant depression at Lenox Hill Hospital in New York. What's equally noteworthy is ketamine's ability to go to work right away, unlike most antidepressants, which take weeks, sometimes months, to provide relief.

"Feeling better faster, getting the mood to improve faster -- that's why ketamine is very promising," Manevitz says.

He cautions, though, that no matter how successful ketamine proves to be, you can't count on a single treatment to cure depression. You need to address all aspects of a person's disease, from the biological and the psychological to the social and environmental.

"Ketamine is not a miracle drug at all," Manevitz says. "It may momentarily take them away from that catastrophic place they're in with depression, but you're not addressing the rest of the patient. It's a complex issue to treat psychiatric issues, and you have to treat the whole patient."

For people considering suicide, though, the drug's rapid response could be life-saving. Recent studies have shown that a single dose of ketamine dramatically reduces suicidal thoughts.

How long the drug's effect lasts remains to be answered -- a few days or weeks, it's believed. But that window of relief could prove critical.

"We need suicide treatments so greatly in psychiatry," says researcher Elizabeth Ballard, PhD. "Ketamine could be a bridge for someone who comes in who is suicidal. They are given ketamine, and for the 3 days or so that it's effective, they can be hooked up with outpatient resources, with other medications, with psychotherapy."

Ballard, a researcher at the National Institute of Mental Health, published a study in August that shows ketamine reduces suicidal thoughts independent of its effect on depression or anxiety.



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other substance dependence, for examples, also account for some suicides. Further research is needed to explore the study's findings.

WebMD Health News | Reviewed by Michael W. Smith, MD on September 23, 2014

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Ketamine Clinics

While researchers continue to study ketamine, practitioners such as Lapidus have already begun to provide it to patients. The Ketamine Advocacy Network lists 17 providers and clinics around the country.

Anesthesiologist Enrique Abreu, DO, runs the Portland Ketamine Clinic in Portland, OR. He works with a mental health specialist -- Marilyn Sears, LCSW and clinic co-founder -- and gives IV ketamine infusions. Most of his patients are self-referrals.

"These people are suffering, and they find us online," says Abreu, who estimates that he has treated 30 people since he opened his clinic 15 months ago.

He says he has no mental health background, but he's got 15 years' experience using ketamine as an anesthetic. In fact, many clinic operators are anesthesiologists rather than mental health specialists.

"It's a weird gray area," Abreu says. "Who's going to help these people and do it safely?"

Before Abreu treats someone, he consults with their psychiatrist or primary care doctor. Treatment then consists of six infusions over 12 days. Each infusion lasts about 45 minutes. Side effects, which often include confusion, lucid daydreaming, and fuzzy vision, clear up quickly. Patients are watched closely and must have pre-arranged transport home. They're barred from driving or using heavy machinery for 24 hours.

Abreu says in his experience, the side effects "go away as soon as the infusion is over, and patients don't have hallucinations."

Abreu says about three quarters of his patients aged 15 to 55 benefit from ketamine. Older patients have a lower response rate. The initial six infusions cost \$3,800, the beneficial



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Lapidus says his clinic will mainly use a nasal spray form of ketamine, a method that he and his former colleagues at Mount Sinai's Icahn School of Medicine found effective. They published the results of their research in April.

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Manevitz, who has also used ketamine in his practice, says we don't know anything yet about ketamine's potential as a long-term treatment for depression.

"The problem is maintaining the gain, prolonging the effect," he says.

Lapidus agrees: "How to maintain benefits: This is an area that needs a lot more research. Most of the studies published have involved only a single treatment."

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