PTSD breakthrough

Jonathan Lubecky, a veteran of the Marine Corps and Army, poses with a .50-caliber sniper rifle at Balad Air Base, Iraq, in 2006.

MDMA shows promise healing mental trauma in FDA-approved clinical trials

When it comes to treating post-traumatic stress disorder, nothing is better than trauma-focused psychotherapies, according to the Department of Veterans Affairs. By centering on the memory or meaning of harrowing and often painful events, veterans can process and make sense of their most stressful experiences in war.

But momentum is steadily growing to battle the symptoms of PTSD with alternative medicine, including one illicit substance that’s showing tremendous promise in recent studies.
MDMA, commonly known as the street drug ecstasy or Molly, is culturally linked to the rave scene of the 1990s. First synthesized in 1912 for pharmacological purposes, the CIA experimented with the substance as a potential psychological weapon during the Cold War. Nearly all research came to a halt in 1985 when it was placed on the list of Schedule I drugs. More recently, however, it’s shown to significantly reduce PTSD symptoms when paired with psychotherapy. The research has been so promising that the U.S. Food and Drug Administration has granted the drug “breakthrough” status and is fast-tracking final phases of clinical trials in the hopes of developing a new countermeasure to PTSD.

Army and Marine Corps veteran Jonathan Lubecky knows the challenges of living with the invisible scars of war all too well. While he was deployed to Balad Air Base, Iraq, in 2006, an enemy mortar crashed down inside the portable toilet he was using. He was left without a single physical scratch, but he would later learn he suffered a traumatic brain injury and developed severe PTSD.

“I got blown up in a Port-o-John—shittiest place to get blown up,” said Lubecky. “Had I stood up, the shrapnel would have gone through me instead of in front of me.”

This event marked the beginning of a life-changing and dangerous journey involving daily suicidal thoughts, which he acted on five separate times. After retiring from the Army in 2009, he began self-medicating with alcohol and marijuana, masking the underlying problems. He also tried the medication prescribed to him by the VA, at one point taking 42 pills per day. But help seemed beyond his grasp.

“Most of what I was thinking was, is this going to be my life for the rest of it? Nightmares every night?” he said. “I felt like the world would be better without me in it.”

But in 2014, Lubecky signed up to take part in a study
involving MDMA-assisted psychotherapy, organized and conducted by the Multidisciplinary Association of Psychedelic Studies (MAPS), an organization working to advance the science of potentially beneficial compounds like MDMA.

MAPS’ multiple clinical MDMA trials have shown to reduce PTSD dramatically.

Wearing his dress blues, Lubecky is an advocate for alternative therapies, including MDMA, which he says helped to cure him of PTSD.

Under close observation, Lubecky ingested MDMA three times over 12 weeks in conjunction with psychotherapy sessions. He would take a green capsule containing 125 milligrams of MDMA, and after roughly 40 minutes, when the drug started to take effect, his therapy session would begin. An additional 70-milligram dose was also offered to help boost the sessions.

“It worked,” said Lubecky. “Five years later, and I still don’t have PTSD, and I haven’t done MDMA since.”

The results stunned him. Lubecky’s Clinician-Administered PTSD Scale (CAPS)—a way to measure PTSD severity—was nearly cut in half. A year later, his depression had dramatically subsided.

According to Dr. Michael Mithoefer, the acting medical director for MAPS and a psychiatrist who is heavily involved
in the clinical trials, MDMA can break down barriers some may have with PTSD and encourage trust—a vital component of a patient-therapist relationship.

“The VA acknowledges that psychotherapy is the best treatment for PTSD,” he said. “But it doesn’t work for a lot of people, at least half.”

Many people have extreme difficulties tolerating therapy and end up dropping out of treatment.

“Sometimes, they are just so overwhelmed by anxiety and emotions that it just doesn’t help,” Mithoefer added.

Emotional numbing is another facet of PTSD, where patients may be able to talk freely about their trauma but are not necessarily meeting the goal of processing memories and emotions.

According to Mithoefer, MDMA helps reverse the brain functions that can paralyze people when trauma is triggered. Brain imaging studies have shown PTSD appears to increase commotion in the amygdala, the brain’s fear center, and reduce activity in the prefrontal cortex, which regulates emotion. MDMA’s ability to overcome fear and defensiveness, increase empathy and compassion, and heighten introspection can significantly improve psychotherapy for PTSD.

It also releases naturally occurring hormones, such as oxytocin and prolactin, which are associated with feelings of trust, intimacy and bonding, making patients more likely to open up during therapy.
Pictured in front of the U.S. Capitol in Washington, D.C., Lubecky, now a civilian, works to bring attention for MDMA-assisted psychotherapy for veterans to U.S. lawmakers.

“IT can be very painful to process trauma, whether you have MDMA or not,” said Mithoefer. “It’s just that MDMA tends to make processing more possible.”

Of the 103 patients that had chronic, treatment-resistant PTSD who completed MAPS’ Phase 2 trials, just over half no longer met the qualification for PTSD diagnosis in the months following treatment. At the one-year mark, 68% no longer qualified. All patients suffered from chronic, treatment-resistant PTSD for an average of just under 18 years. The stunning results were published in the journal Psychopharmacology in May 2019.

Phase 3 trials, the final step of research required by the Food and Drug Administration before deciding to approve a drug for treatment, are currently underway at 14 sites across the United States, Canada and Israel. Mithoefer is hopeful that, following these stages, MDMA-assisted psychotherapy could be an accepted treatment for PTSD by 2022.

However, MDMA, like other psychedelics, remains illegal and can be dangerous in the wrong hands. Independent doctors and psychologists screen all patients participating in these trials. Under the current regimen, MDMA is never given as a take-home drug, and patients only receive it two or three times over several months. Additionally, two therapists are present during the therapy sessions, and breaks are taken to
help “integrate” the experiences.

Despite the success of these trials, MDMA remains a Schedule I substance, which marks the drug as having no currently accepted medical use and a high potential for abuse.

“By no means should we communicate these compounds are risk-free,” said Dr. Roland Griffiths, professor of psychiatry and neuroscience at Johns Hopkins School of Medicine and director of the Johns Hopkins Center for Psychedelic and Consciousness Research. “They’re not.”

But because some psychedelic drugs left the laboratory in the 1960s and began flooding anti-establishment and anti-war movements, they were “promoted in an unwise fashion,” said Griffiths.

The federal reaction that followed mostly stripped scientists from being able to research any potential benefits to psychedelic compounds, including MDMA and psilocybin, the active compound in so-called “magic mushrooms.” The move, according to some advocates, criminalized legitimate science.

Scientists in recent years began picking up such research, thanks in large part to private donations to organizations such as MAPS.

“It wasn’t until we got permission to give a high dose of psilocybin to psychedelic-naive individuals in 2000 that this work began to be reinitiated,” added Griffiths. “We published our study in 2006, and over the course of the last 14 years, increasingly, other academic centers are coming online.”

“DAV is supportive of continued research on nontraditional therapies, complementary and alternative medicine, and expanded treatment options for veterans,” said Deputy National Legislative Director Adrian Atizado. “Anything that can safely help our veterans heal from the lasting psychological impacts of war, particularly for those who tried treatment before
without success, is worth studying further, which these trials are attempting to do.”