MDMA (Ecstasy)-assisted psychotherapy relieves treatment-resistant PTSD

EurekAlert

London, UK (July 19, 2010) MDMA (±3,4-methylenedioxymethamphetamine, also known as Ecstasy), may one day offer hope for individuals with posttraumatic stress disorder (PTSD), even people for whom other treatments have failed. Clinical trial results out today in the *Journal of Psychopharmacology*, published by SAGE, suggests that MDMA can be administered to subjects with PTSD without evidence of harm and could offer sufferers a vital window with reduced fear responses where psychotherapy can take effect.

Before MDMA became used recreationally under the street name Ecstasy, hundreds of psychiatrists and psychotherapists around the world administered MDMA as a catalyst to psychotherapy. MDMA was criminalized in the US in 1985 (it had been illegal in the UK since 1977). Several decades later, this study is the first completed randomised, double-blinded clinical trial to evaluate MDMA as a therapeutic adjunct in any patient population.

Belmont, MA-based Rick Doblin, Ph.D., President of the Multidisciplinary Association for Psychedelic Studies (www.maps.org, a non-profit psychedelic and medical marijuana research and educational organization that sponsored the study), together with South Carolina-based psychiatrist Michael Mithoefer, MD and colleagues, conducted a pilot Phase II clinical trial with 20 patients with chronic PTSD persisting for an average of over 19 years. Prior to enrolling in the MDMA study, subjects were required to have received, and failed to obtain relief, from both psychotherapy and psychopharmacology.

Participants treated with a combination of MDMA and psychotherapy saw clinically and statistically significant improvements in their PTSD over 80% of the trial group no longer met the diagnostic criteria for PTSD, stipulated in the Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV-TR) following the trial, compared to only 25% of the placebo group. In addition, all three subjects who reported being unable to work due to PTSD were able to return to work following treatment with MDMA.

The trial centred on two eight-hour psychotherapy sessions scheduled about 3-5 weeks apart, where 12 subjects received MDMA, and eight took a placebo. Subjects were also given psychotherapy on a weekly basis before and after each experimental session. A blinded, independent rater tested each subject using a PTSD scale at baseline, and at intervals four days after each session and two months after the second session. The clinical response was significant 10 of the 12 in the treatment group responded to the treatment compared with just two of the eight in the placebo group. During the trial, the subjects did not experience any drug-related Serious Adverse Events (SAEs), nor any adverse neurocognitive effects

or clinically significant blood pressure or temperature increases.

After the two-month follow-up, subjects in the placebo group were offered the option to participate in the treatment process again, to receive MDMA on an open-label basis, acting as their own controls. Seven of the eight placebo subjects elected to receive MDMA-assisted psychotherapy, with successful treatment outcomes similar to the subjects initially randomized to MDMA.

PTSD involves exaggerated and uncontrolled fear responses. To treat these, psychotherapists need to help sufferers revisit traumatic experiences. But patients often suffer intolerable feelings when they revisit the trauma, or numb themselves emotionally, resulting in the psychotherapy having little effect. The goal of using MDMA is to temporarily reduce fear and increase trust without inhibiting emotions, especially painful emotions, allowing these patients a window where psychotherapy for their PTSD is effective.

MDMA's pharmacological effects include serotonin release, 5HT2 receptor stimulation and increase in levels of the neurohormones oxytocin, prolactin and cortisol.

Importantly, this trial involved concentrated periods of patient-therapist contact (31 hours over two months) including two all-day therapy sessions and overnight stays in the clinic. "These are not usual features of psychotherapy practice in the outpatient setting," says Michael Mithoefer. MDMA-assisted psychotherapy would require special clinics equipped for longer treatment sessions and overnight stays if an MDMA-based treatment were approved. "This method also involves patient preparation and close follow-up to support further processing of emotions and integration of cognitive shifts that may occur," Mithoefer adds, stressing that these are vital for safety and therapeutic effect.

Measures like these may prove a price worth paying, however, to alleviate the debilitating effects of PTSD on sufferers in future.

The authors caution that the study does have limitations for example they did not look at gender and ethnic factors in their sample selection. Another important limitation was that most participants and trial investigators guessed accurately whether they were in the treatment or the placebo group. The placebo had no psychoactive effect and investigators could detect raised blood pressure and other symptoms in the MDMA group. A long-term follow-up to the study just published, evaluating subjects an average of about 40 months post-treatment, is underway.

The investigators have now received the go ahead from the US Food and Drug Administration (FDA) for a protocol for a three-arm, dose-response design that they expect will result in successful blinding. This new study is for US veterans with war-related PTSD, most from Iraq and Afghanistan and a few from Vietnam. MAPS is currently sponsoring MDMA/PTSD Phase 2 pilot studies in Switzerland and Israel, and is working to start additional pilot studies in Canada, Jordan and Spain.

SOURCE [1]

Links:
[1] http://www.eurekalert.org/pub_releases/2010-07/spu-mp071210.php