

## LSD and psilocybin in the treatment of cluster headaches: a report on proposed research at Harvard Medical School



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I am delighted to report to the MAPS membership the progress we have been making towards restarting LSD research at Harvard, as we continue to collect evidence for the medical efficacy of LSD and psilocybin. As Dr. Halpern reported in a previous *MAPS Bulletin*, MAPS had been approached by a group of cluster headache sufferers who were convinced that psilocybin treated their condition and were interested in funding a clinical trial to prove it. You probably have never heard of cluster headache. It's not like a migraine. It's much more rare and much more painful: some compare it to having a hot poker slowly driven through the eye, others to giving birth through their eye socket. Although each headache can last as little as half an hour, they come on multiple times a day, at strikingly predictable times (recent neuroimaging shows that they originate in the hypothalamus, which is the part of the brain that controls the circadian rhythm) destroying jobs, lives and relationships. It is the only headache so severe and unrelenting that patients have been known to kill themselves to end their agony.

And so it appears that psilocybin and LSD may treat this horrible condition. Anti-cluster-headache medications fall into three main classes. The first is medication that takes away an individual headache, such as sumatriptan, ergotamine and—possibly—psilocybin and LSD. The second is medication that ameliorates an entire cluster of headaches, such as lithium, verapamil and—possibly—psilocybin and LSD. The third is medication that prophylaxes against the occurrence of future clusters, which is a property shared by no known medication—except, perhaps, psilocybin and LSD.

The first step in verifying these extraordinary claims is simply to collect individual case reports for publication as a case series. A case series typically consists of six to ten cases of an interesting and heretofore unreported phenomenon that some astute doctor has observed over a period of years. It carries no scientific weight, but can be used as a justification for mounting a more formal controlled trial to test if the phenomenon reported actually does exist. Thanks to the power of the Internet and the efforts of the Clusterbusters ([www.clusterbusters.com](http://www.clusterbusters.com)), however, I have been able to collect over sixty cases of psychedelic-treated cluster headaches in only a couple of months! The Clusterbusters website was helpful. A "Quality of Life" survey on Erowid ([www.erowid.org/plants/mushrooms/survey/mushrooms\\_survey\\_headaches.shtml](http://www.erowid.org/plants/mushrooms/survey/mushrooms_survey_headaches.shtml)) yielded a bonanza of email addresses, most belonging to people eager to discuss their cluster headaches. Subsequent word-of-mouth communication about our study has also led to unsolicited emails to Dr. Halpern and myself by cluster headache sufferers asking to be included in our study and willing to discuss their own personal experiments.

Already some interesting patterns are emerging from the cases I have collected so far, including effective dosage regimen, possible efficacy of sub-psychedelic doses, and obstructive interactions with other medications. All of this information will prove extremely helpful in future protocol design, as we move forward with this project.

In a few weeks we will submit this case series for publication. Following submission, Dr. Halpern and I will start drafting a protocol for a randomized prospective trial pitting psilocybin against LSD against placebo, using lessons learned from analyzing the case series to design a trial most likely to provide sound scientific information. O.U.C.H. (Organization for the Understanding of Cluster Headaches) has already donated \$1000 to help support the protocol design. This protocol will then be submitted to the McLean Hospital IRB (Institutional Review Board) for ethical oversight, then to the FDA (Food and Drug Administration) for approval. Assuming all goes well, we could be recruiting participants within this year! When this happens, it will be an invaluable test of the potential of psychedelics. It will also be a demonstration of the power of grass-roots activism to turn an idea into action, harness the might of the Establishment and make the world a better place.

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