

## **CC108. Psilocybin for the treatment of cluster headache, case report**

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### **Objectives**

To describe the clinical case of a patient who used psilocybin for the treatment of cluster headache. To describe the modality, dose, efficacy and adverse effects of psilocybin in the patient. To carry out a review of the available evidence about this treatment.

### **Case description**

Male, 60 years old. Smoker. History of 19 years of evolution of right periorbital headache, intensity 10/10, throbbing, lasting up to two hours with tearing, conjunctival congestion and rhinorrhea ipsilateral to the pain and psychomotor agitation. Presents up to 3 episodes in 24 hours, reporting at least one at night in the first half of it. The evolution has been with asymptomatic periods between one to three months. MRI of normal skull. With episodic cluster headache raised, crisis and preventive treatment is started. For crises oxygen-therapy MFL 7 to 10 liters per min with improvement. He has received multiple preventive treatments: prednisone 60 mg a day for a week, verapamil up to 480 mg a day, topiramate 100 mg a day, lithium up to 900 mg a day, sometimes in association with melatonin with poor response to them. In the last 6 years he self-indicates psilocybin, with which he becomes aware from the online forum "Clusterbusters". It is used in the form of an infusion from *Psilocybe cubensis* on a monthly basis, at doses of 0.5 to 1.0 g of the active ingredient associated with caffeine. From the start of treatment, he reports a decrease of more than 50% in the frequency and intensity of the crises, with remission periods of up to 1 year and a half. As an adverse effect with a higher dose than usual, he refers to autoscopic-type hallucinations, on one occasion.

### **Conclusions – Relevance to the field**

Cluster headache is considered one of the most intense headaches, with suicidal ideas in many patients. The treatment indicated is that of crises and prevention. Although there are numerous drugs, none have universal efficacy. It is to prioritize that psilocybin (hallucinogen) is being used by patients with cluster headache who seek advice in international forums. Although the patient had a significant reduction in the frequency and intensity of the crises, the precise dose for the treatment of this entity is not known, so its use may be risky (hypertension, secondary headache and hallucinations). Two phase 1 randomized controlled clinical trials of the use of psilocybin for the treatment of cluster headaches are currently underway and are expected to provide further evidence

of its efficacy. This case report provides empirical evidence in favor of the trend towards the use of psilocybin as preventive therapy for cluster headache, given the limited effectiveness of conventional therapy in many of these patients. There is a growing interest regarding the above, which has generated the appearance of new research, which today has provided little quality evidence due to the illegality of the substance and the absence of completed clinical trials that objectively compare the efficacy and safety of psilocybin compared to current best treatments.