



Cannabidiol in the treatment of migraine: studies and future perspectives

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Introduction

Migraine is one of the most disabling and prevalent conditions in the population. It is related to the release of pro-inflammatory mediators in the central nervous system, triggering painful episodes. Cannabidiol (CBD) has significant potential to inhibit such pro-inflammatory mediators and consequently reduce pain symptoms.

Objective

To describe the progression of a patient diagnosed with refractory migraine, analyzing the relationship between CBD use and symptom improvement.

Case Report

A 37-year-old female patient from Teresina has been patient with refractory migraine for 1 year. She has experienced headaches since the age of 11, with sporadic episodes that improved with dipyrone use. There was an increase in frequency, occurring three times a week, with improvement after using non-steroidal anti-inflammatory drugs. She was undergoing psychiatric treatment, using benzodiazepine and antipsychotic. A year ago, she consulted a neurologist, complaining of a headache lasting 38 days, with a pain score of 8/10 VAS, refractory to NSAIDs, with throbbing pain in the occipital region radiating to the cervical area, associated with photophobia, phonophobia, and aura, which worsened with physical exertion and stress. She was treated with topiramate, oral corticosteroids, and beta-blockers for control, and triptan for acute relief. Due to the lack of response to initial treatment, she used anticonvulsant and muscle relaxant, along with lifestyle changes. However, with the persistence of pain, anticonvulsant and antipsychotic were added to her regimen alongside topiramate. Given the inefficacy in pain control, treatment with progressive doses of cannabidiol was initiated at 20 mg/day, with an increase of 25 mg/week, along with continuous anticonvulsant use. There was an improvement in the headache with symptom resolution by the fourth week. Currently, she uses 1 mL/day (50 mg/mL) of CBD, reporting one episode of headache (VAS 6/10) after a month of CBD use, relieved with triptan.

Conclusion

The diagnosis and treatment of migraine should be individualized for each patient. In this context, the therapeutic use of cannabidiol for treatment-refractory migraine cases is a recent alternative in the scientific literature, requiring further studies to be effectively understood and established as a potential approach for a broad spectrum of disease manifestations.