Headache Medicine

Case Report - Secondary Headache Due to Idiopathic Intracranial Hypertension

Isis Maria Lima Cruz; Támara Larissa Silva Barbosa; Gabryel Felipe Alves de Sousa

Universidade Federal do Piauí, Teresina - PI - Brazil.

Categoria: Cefaleias Secundárias

Introduction
Idiopathic intracranial hypertension (IIH) is a rare condition characterized by increased intracranial pressure of undefined cause. This condition is more common in young obese women of reproductive age, and its typical symptoms include daily headache, pulsatile tinnitus, visual disturbances, and papilledema with associated vision loss, with the possibility of other cranial nerve paralysis. The exact causes of this condition are still unknown, but obesity and cerebrospinal fluid flow imbalance are suggested as possible contributors. Due to the lack of knowledge about the exact causes of this condition, the therapeutic approach focuses on weight loss and the use of carbonic anhydrase inhibitors, such as acetazolamide, to reduce intracranial pressure.

Objective
To analyze the progression and treatment of a patient with idiopathic intracranial hypertension, focusing on the relationship between medical interventions and symptom improvement, with special emphasis on headaches.

Case Report
A 62-year-old female patient with hypertension, under treatment for idiopathic intracranial hypertension since 2015. Initially, she reported chronic pulsatile headache in the frontal region, phonophobia, photophobia, and nausea, with suspicion of migraine, treated with topiramate 25 mg. Initial magnetic resonance imaging showed no abnormalities. In 2016, she was admitted twice, first presenting with holocranial headache accompanied by nausea, vomiting, visual blurring, and tearing. A lumbar puncture revealed an opening pressure of 29 cmH2O, confirming the IIH diagnosis. During the second admission, she reported a history of unilateral paralysis of the extraocular muscles associated with diplopia and decreased visual acuity. In both admissions, her physical examination showed no significant changes except for obesity, and magnetic resonance imaging showed no abnormalities, but retinography revealed signs of hypertensive retinopathy and papilledema. In 2017, the patient was on topiramate 25 mg every 12 hours, acetazolamide 250 mg daily, hydrochlorothiazide 25 mg daily, and enalapril 10 mg daily; however, she still complained of daily headaches. On physical examination, her blood pressure was normal, and cerebrospinal fluid cytopathology indicated a urea concentration of 41 mg/dL, glucose of 61.2 mg/dL, and total proteins of 42 mg/dL. Cytometry and cytology examination indicated 2 leukocytes per mm3. After continuous medication use, there was a significant improvement in symptoms, and the acetazolamide dose was optimized to 500 mg daily. In 2018, the patient underwent visual field testing, which showed diffuse reduction in visual fields, relative and dense scotomas in both hemifields, and decreased foveal perception in both eyes, indicative of prechiasmatic lesions. As a result, excessive tearing improved, but chronic refractory headache symptoms persisted. At the end of 2018, the patient reported excessive tearing again, as well as lower back pain and lower limb edema, with an improvement in the headache condition. The patient was taking topiramate 25 mg daily and acetazolamide 250 mg every 12 hours. In 2021, she returned to the hospital with headache lasting for 30 days, localized in the right fronto-temporal region and associated with reduced visual acuity in the right eye. She was then prescribed acetazolamide 250 mg every 8 hours and topiramate 75 mg daily.

Conclusion
This case highlights the complexity of idiopathic intracranial hypertension (IIH), a rare condition with an unknown cause. Medication therapy, especially with topiramate and acetazolamide, provided relief from symptoms, particularly the headache. This emphasizes the need for a multidisciplinary approach and constant monitoring to improve the quality of life of patients affected by this condition.

Keywords: Idiopathic intracranial hypertension; headache; case.