



## Acetazolamide in the treatment of idiopathic intracranial hypertension: a real-world study

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### Introduction

Acetazolamide is a carbonic anhydrase inhibitor widely used in the treatment of idiopathic intracranial hypertension (IIH), a condition characterized by increased intracranial pressure without detectable apparent cause, often resulting in symptoms such as headache, papilledema, and transient visual loss. The efficacy of acetazolamide in managing IIH has been demonstrated in various clinical studies, notably improving patients' symptoms and playing a crucial role in preventing long-term visual complications. The therapeutic approach with acetazolamide is generally well-tolerated, although side effects such as paresthesia, fatigue, and changes in taste may occur.

### Objective

In the present study we aimed to assess the results with Acetazolamide in a real-life cohort of Brazilian patients

### Methods

The data of IIH patients treated at Santa Casa since 2019 were evaluated, with information obtained during consultations and from medical records. Sociodemographic and clinical data were collected. The outcomes assessed were headache attributed to HII, pulsatile tinnitus, reduced visual acuity, diplopia, and papilledema before and after treatment with acetazolamide. Comparisons were made using the chi-square test.

### Results

Forty patients were included, all of them were female. The mean age was  $33.9 \pm 11.5$  years. Twenty-two patients were obese, 10 were overweight, and in 8 this information was not obtained. The mean BMI was  $33,5 \pm 4,3$ . The mean follow-up time was  $55.4 \pm 48.4$  days. The mean Acetazolamide dose was  $972.2 \pm 523.6$ . Six patients reported side effects (paresthesias=6 and dizziness and tinnitus=1) with four of them discontinuing acetazolamide, which was replaced by topiramate.

The frequencies of observed evaluated outcomes were: headache (90% x 0%,  $P < 0.0001$ ); low visual acuity (75% x 50%,  $P = 0.02$ ); papilledema (75.7% x 54.5%,  $P = 0.001$ ); diplopia (33.3% x 25%,  $P = 0.006$ ); and tinnitus (27.8% x 0%,  $P = 0.0007$ ).

### Conclusion

The data confirm the good tolerability and efficacy of acetazolamide, which was discontinued in only 10% of cases. All patients who continued the medication had a satisfactory response, with resolution of headache and tinnitus. Regarding neuro-ophthalmological outcomes, there was significant improvement in all evaluated parameters. Our data support that this medication should be promptly introduced in patients diagnosed with IIH.