



## The importance of research on idiopathic intracranial hypertension in pregnant women - a case report

Milena Amandine Odorizzi, Pedro André Kowacs, Mohamad Ali Hussein, Anna Cláudia Lavoratti, Maria Julia de Souza Padulla, Carolina Brun Ferrarini, Karen Arissa Iwase

Centro Universitário Fundação Assis Gurgacz, Cascavel, Paraná, Brazil

### Introduction

Intracranial hypertension is a rare condition in pregnant women, which can result in severe complications if not diagnosed and treated appropriately. When idiopathic in nature, it becomes more challenging, as there is no clear cause for its onset. Its pathophysiology is still not completely understood, but neuroendocrine and neurovascular alterations have been described as a possible cause. Such pathology, with its classic signs and symptoms, highlights the challenges of clinical management.

### Objective

To report a case and management of idiopathic intracranial hypertension in a 24-week pregnant woman.

### Case Report

A 32-year-old pregnant woman at 24 weeks gestation was referred by her obstetrician with complaints of mild to moderate holocranial headache, most intense in the occipital region, accompanied by photophobia and phonophobia, with episodes of vomiting and worsening with physical effort. She also reports pulsatile tinnitus and bilateral visual blurring when lying down. The patient denies previous episodes of headache, diplopia, dysarthria, weakness, sensory changes, imbalance, or any other neurological symptoms. She denies excessive weight gain beyond what is expected for pregnancy. She has had hypothyroidism since adolescence. Examinations: No increase in blood pressure and negative COVID-19 test. Retinography confirmed bilateral papilledema. Lumbar puncture with manometry showed an opening pressure >50 cmH<sub>2</sub>O. Brain MRI and intracranial venous MR angiography indicated signs of intracranial hypertension without cerebral venous thrombosis (CVT). Venous blood gas analysis: pH 7.32; pCO<sub>2</sub>: 33; HCO<sub>3</sub>: 17; BE: -8.4. She is taking Levothyroxine 112mcg/day; Diamox 500mg 3 times daily; Bicarbonate 2g 3 times daily. After 2 months, at the follow-up appointment, she reports that headache episodes have decreased, but pulsatile tinnitus still persists. At a trimestral reassessment, she reports that delivery was via cesarean section, denies headache, pulsatile tinnitus, and visual blurring. She returned to pre-pregnancy weight. Complete remission of symptoms.

### Conclusion

This case illustrates the complexity of managing idiopathic intracranial hypertension in pregnant women. Early diagnosis and immediate intervention are crucial to avoid complications for both the mother and the fetus. Regular follow-up and monitoring were essential for a favorable outcome, with complete symptom remission after cesarean section.