VOLUME - 14, ISSUE - 03, MARCH - 2025 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Neurology

WHEN HEADACHE HIDES A MYSTERY: A RARE CASE OF IDIOPATHIC INTRACRANIAL HYPERTENSION IN A YOUNG NON-OBESE WOMAN.

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ABSTRACT Idiopathic intracranial hypertension (IIH) is a rare neurological disorder characterized by increased intracranial pressure without an identifiable cause. It predominantly affects young, obese females; however, atypical presentations can pose diagnostic challenges. We present a rare case of IIH in a non-obese, young female who presented with persistent headaches, transient visual disturbances, and papilledema. Lumbar puncture confirmed elevated cerebrospinal fluid pressure with normal neuroimaging findings. Despite initial medical management with acetazolamide, her symptoms persisted, necessitating further intervention. This case highlights the importance of early recognition and tailored management strategies in IIH, especially in atypical presentations. Timely diagnosis is crucial to prevent potential complications, including permanent vision loss. Through this case report, we aim to raise awareness among clinicians regarding the variable presentations of IIH, emphasizing the need for a multidisciplinary approach to optimize patient outcomes.

KEYWORDS :

INTRODUCTION

Idiopathic intracranial hypertension (IIH), also known as pseudotumor cerebri, is a neurological disorder characterized by elevated intracranial pressure (ICP) without an identifiable cause. It commonly affects young, obese women. The exact pathophysiology remains unclear, but proposed mechanisms include altered cerebrospinal fluid (CSF) dynamics, hormonal influences, and metabolic dysfunction.

The clinical presentation of IIH typically includes persistent headaches, transient visual obscuration, pulsatile tinnitus, and papilledema, which may progress to vision loss if left untreated. Diagnosis is established based on the modified Dandy criteria, which includes symptoms of increased ICP, normal neuroimaging findings, and elevated CSF pressure (> 25 cm H O) on lumbar puncture. Magnetic resonance imaging (MRI) and magnetic resonance venography (MRV) are crucial in ruling out secondary causes such as cerebral venous sinus thrombosis.

Management of IIH aims to reduce ICP and prevent visual impairment. First-line treatment includes weight loss and acetazolamide, a carbonic anhydrase inhibitor that reduces CSF production. In cases of progressive vision loss, surgical interventions such as optic nerve sheath fenestration or CSF shunting may be required. Venous sinus stenting has also emerged as a potential treatment in patients with venous sinus stenosis.

Case Profile

A 19-year-old girl presented with complaints of headache, double vision, bilateral ocular pain, and inward deviation of the eyes, associated with multiple episodes of vomiting on and off for two weeks.

Blood Investigations: Normal

- Brain Imaging (MRI Brain with Contrast): Normal
- Fundus Examination: Grade 2 Papilledema
- Other Ophthalmological Examinations: Normal
- CSF Studies: Normal
- CSF Pressure (measured using a manometer):32 cm H O
- USG Abdomen, Pelvis, and KUB:Normal
- X-ray Chest: Normal

The patient was initially managed with oral acetazolamide but did not respond well. Subsequently, a guarded lumbar puncture was performed, leading to drastic clinical improvement.

DISCUSSION AND CONCLUSION

Idiopathic intracranial hypertension (IIH) is classically associated with young, obese women, yet cases in non-obese individuals remain rare and pose a diagnostic challenge. The absence of obesity as a risk factor may delay recognition, as clinicians often associate IIH with excess weight. Alternative mechanisms, such as hormonal imbalances, vitamin A metabolism dysfunction, or venous sinus abnormalities, may contribute to elevated intracranial pressure in non-obese patients. This case highlights the need for a broader clinical perspective when evaluating IIH.

Our patient presented with typical symptoms of IIH, including headaches and visual disturbances, despite lacking common risk factors. The diagnosis was confirmed through neuroimaging and lumbar puncture findings, emphasizing the importance of maintaining a high index of suspicion for IIH even in atypical cases. The management approach followed standard IIH treatment protocols, including acetazolamide and close ophthalmologic monitoring. While weight loss is a cornerstone of treatment in obese patients, other therapeutic strategies, such as optimizing intracranial pressure-lowering medications and considering surgical interventions if necessary, play a crucial role in non-obese individuals.

This case underscores the need for further research on IIH in non-obese patients to better understand its pathophysiology and risk factors. Clinicians should recognize that IIH can occur in individuals outside the typical demographic, ensuring timely diagnosis and treatment to prevent vision-threatening complications.

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