

Posterior Ischemic Optic Neuropathy Following Acute Pancreatitis: A Rare Cause of Acute Bilateral

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Abstract

A 22-year-old man was referred to Basir Eye Clinic for visual electrophysiological evaluation, including visual evoked potential (VEP) and electroretinography (ERG). According to his medical records, he had been diagnosed with acute pancreatitis and was receiving vitamin supplementation. He presented with a sudden bilateral decrease in vision, which was more pronounced in the right eye than in the left. Visual electrophysiological testing revealed abnormal VEP findings, while ERG results were within normal limits. At the initial follow-up examination, a modest improvement in visual acuity was observed in the patient's left eye.

Keywords: Pancreatitis; Vision Loss; Visual Evoked Potential; Posterior Ischemic Optic Neuropathy.

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Introduction

Unexpected visual decline is devastating. The episode is particularly alarming when it arises as a complication of a procedure involving organs outside the eye.

Shushtarian S.M. et al. (2025) described the case of a 37-year-old woman who developed progressive visual dimming in her left eye 12 days after receiving an intragastric botulinum toxin type A injection. The close temporal association between toxin exposure and symptom onset supported a diagnosis of toxin-induced optic neuritis¹. In a separate report, Shushtarian S.M. et al. (2025) presented the case of a 35-year-old man who had light perception only in his right eye and no light perception in his left eye. His medical history was significant for a pituitary adenoma, for which he had undergone adenomectomy followed by cranial radiotherapy. Subsequently, he developed profound visual loss and was diagnosed with radiation-induced optic neuropathy, which ultimately resulted in blindness².

Shushtarian et al. (2025) presented the case of a 45-year-old man who developed ocular pain and unilateral vision loss following root canal treatment. A comprehensive ophthalmic evaluation, including relevant diagnostic investigations, was performed, leading to a diagnosis of branch retinal artery occlusion (BRAO)³.

Shushtarian et al. (2022) reported a case of bilateral central vision loss in a 62-year-old patient following cardiac surgery. Although the surgical procedure was successful and no visual disturbances were noted immediately after the operation, the patient began to complain of visual impairment on the second postoperative day while in the cardiac intensive care unit (ICU). Ophthalmologic evaluation confirmed central retinal artery occlusion (CRAO) as the cause of blindness⁴.

Shushtarian et al. (2022) described the case of a 75-year-old man who experienced a profound decline in visual acuity, with only light perception remaining in both eyes. Review of his medical history revealed that he had undergone ozone injection therapy for spinal stenosis. Two days after the procedure, he developed significant visual deterioration. A comprehensive ophthalmic evaluation was performed, and the patient was ultimately diagnosed with anterior ischemic optic neuropathy (AION)⁵.

Shushtarian et al. (2021) reported the case of a 25-year-old woman who developed bilateral blurred distance vision following rhinoplasty. Routine ophthalmic examinations revealed no abnormalities. Additional investigations, including visual evoked potential (VEP) testing and brain magnetic resonance imaging (MRI), were also normal. As



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no definitive cause of the visual symptoms was identified, regular follow-up was recommended for further evaluation⁶.

Case Report

A 22-year-old man was referred to Basir Eye Clinic for visual evoked potential (VEP) and electroretinography (ERG) testing. He presented with acute bilateral visual loss, which was more severe in the right eye than in the left. His medical history was notable for acute pancreatitis.

VEP testing revealed significantly prolonged P100 latencies of 138 ms in the right eye and 120 ms in the left eye. ERG testing demonstrated normal b-wave amplitudes in both eyes.

Based on the clinical findings and comprehensive ophthalmic evaluation, the patient was diagnosed with posterior ischemic optic neuropathy (PION). Visual acuity in the left eye had improved to 2/10, and the P100 latency on visual evoked potential (VEP) testing had declined to 115 ms.

Discussion

A young man with pancreatitis and severe bilateral visual impairment was referred to Basir Eye Clinic for visual evoked potential (VEP) and electroretinography (ERG) testing. The VEP findings were abnormal, whereas the ERG results were normal. Based on these findings, a diagnosis of posterior ischemic optic neuropathy was made. The present findings are supported by previous reports in the literature. At the three-month follow-up, a slight improvement in visual function was observed in the left eye, whereas no significant change was noted in the right eye.

Chylová et al. (2022) described a 24-year-old man with acute pancreatitis who developed decreased visual acuity and visual field defects. Following comprehensive ophthalmic and neurological evaluations, posterior ischemic optic neuropathy was diagnosed⁷.

Similarly, Rana et al. (2024) reported a 51-year-old woman with moderate to severe acute pancreatitis. On day 11 of illness, she developed left periorbital pain, lacrimation, and blurred vision. Subsequent ophthalmic examination revealed optic disc edema and a mild reduction in visual acuity, leading to a diagnosis of left optic neuropathy⁸.

Conclusion

Visual disturbances are an uncommon complication of

acute pancreatitis. Posterior ischemic optic neuropathy should be considered as a potential cause of acute visual loss in these patients. Awareness of this rare but serious complication among clinicians may facilitate prompt diagnosis and appropriate management.

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Competing Interests

The authors declare no conflict of interest.

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