

Case Report

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Case Report: Optic Nerve Glioma

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Introduction

Optic nerve gliomas are rare, typically low-grade tumors that arise from the glial cells of the optic nerve. They are most commonly diagnosed in children and are often associated with neurofibromatosis type 1 (NF1). This case report discusses the clinical presentation, diagnostic process, treatment, and outcomes of a patient with optic nerve glioma.

Case Presentation

Patient Information

Age: 11 years

Gender: Male

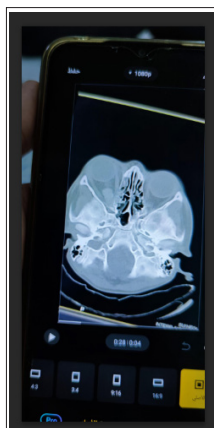
Medical History: No significant past medical history, no family history of neurofibromatosis.

Clinical Presentation

The patient presented with slow gradual visual loss in the right eye over 12 months. Parents also noted occasional proptosis (bulging of the eye) and strabismus (misalignment of the eyes).

Diagnostic Workup:

- **Systemic Examination:** There is two neurofibromas lesions one in his leg and other in his back.also some freckling in part of his body was found.
- **Ophthalmologic Examination:** Decreased visual acuity in the right eye (6/9) and the left eye amblyopic (6/60), axial proptosis, relative afferent pupillary defect (RAPD), and optic disc pallor.
- **Imaging:** CT and MRI of the brain and orbits revealed an enlarged right optic nerve with a fusiform mass extending from the optic disc to the optic chiasm, consistent with an optic nerve glioma.





Treatment

Given the patient's age and the tumor's location, a conservative approach was initially adopted. The patient was monitored with regular ophthalmologic exams and MRI scans. Due to visual loss in left eye due to amblyopia and slow tumor growth, observation was initiated with closeup following.

Outcome and Follow Up

follow-up with regular vision exam with MRI and ophthalmologic exams continues to monitor for any signs of progression.

Discussion

Optic nerve gliomas are typically slow-growing and have a favorable prognosis, especially in patients without NF1. Treatment options include observation, chemotherapy, and, in some cases, radiation therapy or surgery. The choice of treatment depends on the patient's age, tumor size, and symptoms.

Conclusion

This case highlights the importance of early diagnosis and regular monitoring in managing optic nerve gliomas. While many cases can be managed conservatively, timely intervention with chemotherapy can be crucial in preventing further visual loss [1-5].

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