A Case Report on Bilateral Orbital Maliganant Lesion with Proptosis

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ABSTRACT

Inroduction: The prevalence of lymphoma has steadily increased over time, with regular reports of diverse and unusual appearances and a dizzying array of perplexing categories that still do not adequately account for all occurrences.

Case Report: A 25-year-old woman came in with a five-month history of both of her eyes becoming noticeably more prominent. Visual acuity of counting fingers close to the face over the right eye and 6/18 over the left eye. Fundus examination showed an edematous disc in both eyes. Magnetic resonance Imaging showed large ill-defined lesion involving the right inferior frontal and right temporal lobe. There was compression of right optic nerve and optic chiasma. Mucosal thickening noted at bilateral maxillary and ethmoid sinuses. An orbital biopsy was suggested since there was a suspicion of a malignant tumour, most likely lymphoma

Conclusion: Our case highlights the role of an ophthalmologist in diagnosing a malignant lesion which was first presented with proptosis in an eye OPD.

Keywords: Orbital malignant lesion; Proptosis; Lymphoma

INTRODUCTION

The prevalence of lymphoma has steadily increased over time, with regular reports of diverse and unusual appearances and a dizzying array of perplexing categories that still do not adequately account for all occurrences. Non-Hodgkin lymphomas (NHL) of the orbit are a prevalent variant. The extraconal location is where it is most frequently found. Lymphoma originating from one of these locations is called primary orbital lymphoma. Secondary orbital lymphoma is lymphoma that has progressed to the orbit from extra orbital locations. Immune-compromised disorders including ageing, HIV/AIDS, or immunosuppressive medications are the main contributors to the pathophysiology of orbital lymphoma. Recent researches had indicated a link between orbital lymphoma and various pathogens such as H. pylori and certain viruses. Proptosis, a slow-growing palpable lump or painless swellings of the eyelids are typical symptoms of orbital lymphomas.

Our case highlights the role of an ophthalmologist in diagnosing a malignant lesion which was first presented with proptosis in an eye OPD.

CASE REPORT

A 25-year-old woman came in with a five-month history of both of her eyes becoming noticeably more prominent. The left eye was affected first, and two to three days later; the right eye was affected as well. Prior to the development of eye prominence, the patient had no significant ocular or systemic diseases. When examined, the patient appeared a little listless. Vital signs were steady. There were palpable lymph nodes in the cervical and axillary region. When the eyes were examined, an axial proptosis measuring 21 mm for the right eye and 24 mm for the left eye was found at an outer intercanthal distance of 84 mm [Figure 1]. Visual acuity of counting fingers close to the face over the right eye and 6/18 over the left eye.

The left eye has greater lagophthalmos than the right. Both eyes' ocular mobility was constrained in all directions of vision. In the right eye, the relative afferent pupillary defect was negative, whereas in the left eye, it was positive. A fundus examination of both eyes revealed an edematous disc. Based on the clinical findings, the differential diagnosis included neuroblastoma, granulocytic sarcoma, and inflammatory pseudotumor.

Magnetic resonance Imaging [Figure 2] showed large ill-defined lesion involving the right inferior frontal and right temporal lobe, which was expansile in nature. The lesion was causing mass effect over the brainstem. There was compression of right optic nerve and optic chiasma. Mucosal thickening noted at bilateral maxillary and ethmoid sinuses. An orbital biopsy was suggested since there was a suspicion of a malignant tumour, most likely lymphoma. But unfortunately, patient did not come for follow up.

DISCUSSION

Leukocytes, primarily lymphocytes, plasma cells, and dendritic histiocytes are the primary sources of lymphomas, which are solid malignant neoplasms. The orbit, skin, oropharynx, gastrointestinal tract, and bone marrow are among the extranodal areas where lymphoma most frequently develops, along with lymph nodes and primary lymphoid tissue.

Systemic NHL in adults often appears in the fifth or sixth decade, and childhoodpresentations are relatively uncommon [1]. The majority of orbital lymphomas are NHL, which often manifest anteriorly in the orbit during the sixth and seventh decade of life [1]. Although NHL was the most common malignant tumour of the eye and ocular adnexa (55%), the youngest patient in one documented case series [2] was 15 years old, and the median age was 71. In another review [3]

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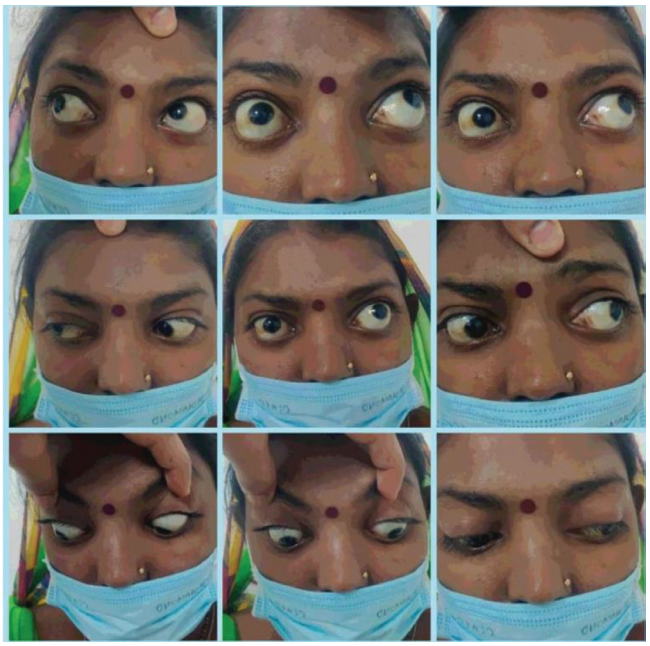

Figure-1: Clinical picture of nine gaze showing proptosis in right eye and left eye

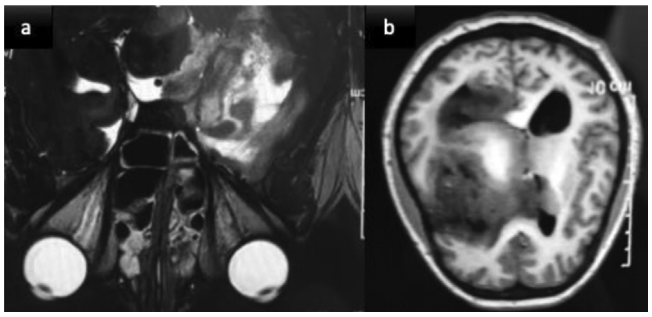

Figure-2: Magnetic resonance Imaging showed (a) compression of right optic nerve and optic chiasma, (b) large ill-defined lesion involving the right inferior frontal and right temporal lobe

of 145 patients with lymphoma orbit and/or adnexa and/or ocular, the median age was 66 years, 10% were bilateral, and the youngest patient was three years old.

27% of people had exophthalmia. Only 18.2% of the 340 paediatric orbital tumours examined by Kodsi et al. were malignant (11.5% original and 6.8% metastatic), according to their review[4] of the tumours. Rhabdomyosarcoma (24) was the most prevalent malignant neoplasm out of 62 malignant tumours, with lymphoma (five) being far less common. NHL of the B-cell type makes up the majority of lymphomas of the eye and its adnexa [5].

Indolent lymphomas respond well to radiotherapy, aggressive lymphomas respond well to chemotherapy, and a combination of the two may even be more successful [6]. Increased risk of spread is linked to bilateral involvement, subcutaneous tissue extension, or temporalis fossa involvement [7]. Poor prognosis indicated by higher grade and loss of orbital wall [8].

CONCLUSION

In conclusion, primary orbital lymphoma is a rare clinical condition with a variable clinical trajectory. After the proper staging, it can be successfully treated with multimodal therapy.

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