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ELEVENTH ANNUAL MEETING

ACUTE MYELOID LEUKEMIA WITH UNUSUAL OCULAR PRESENTATION: A CASE REPORT

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INTRODUCTION

Acute myeloid leukemia (AML) is a heterogeneous blood neoplasm. Ocular involvement in AML can compromise the tissues that compose the eye. Ocular involvement may precede the diagnosis of AML and can lead to a poor prognosis.

OBJECTIVE

We report an unusual ophthalmological presentation in a patient with AML.

CASE PRESENTATION

This is a case report of a 37-year-old male patient who presented at Mansoura Ophthalmic Hospital outpatient clinic with progressive deterioration of vision within 3 days, and no prior history of systemic diseases, drug intake, or trauma. **Ophthalmic examination:** Best Corrected Visual Acuity: Hand Motion: 1.0, color vision was severely affected bilaterally, and relative afferent pupillary defect (RAPD) in the left eye. No abnormality was detected in the anterior segment. Fundus examination revealed right eye infiltration of the optic disc (whitish cellular disc) [fig.1] and left eye disc edema [fig.2]. MRI showed right optic nerve head infiltration and left retrobulbar optic nerve infiltration in the anterior orbital portion sparing the optic nerve head.

Ophthalmology diagnosis was infiltrative optic neuropathy most likely due to leukemia or lymphoma.

INTERVENTIONS

The patient was referred to Oncology Center at Mansoura University. Hepatosplenomegaly and cervical lymphadenopathy were detected on physical examination. CBC revealed pancytopenia and blast cells were detected in peripheral blood smear. Elevated liver functions and CRP at initial workup. Bone marrow and flow cytometry revealed AML (M1-M2), negative cytogenetics, and negative FLT3-ITD. The patient was planned for IT chemotherapy and CSF analysis after brain radiology and correction of thrombocytopenia.

RESULTS & OUTCOMES

The patient received standard induction chemotherapy (3+7) with supportive measures. His CT brain was unremarkable. The patient developed septic shock and liver functions were highly elevated. Pulmonary infection or alveolar hemorrhage was suspected. He was referred to ICU and unfortunately passed away.

CONCLUSION

Leukemic optic neuropathy occurs infrequently as a part of the initial presentation; it is more common at relapse and carries a poor visual prognosis. It is also an indicator of CNS infiltration in patients with acute leukemia.

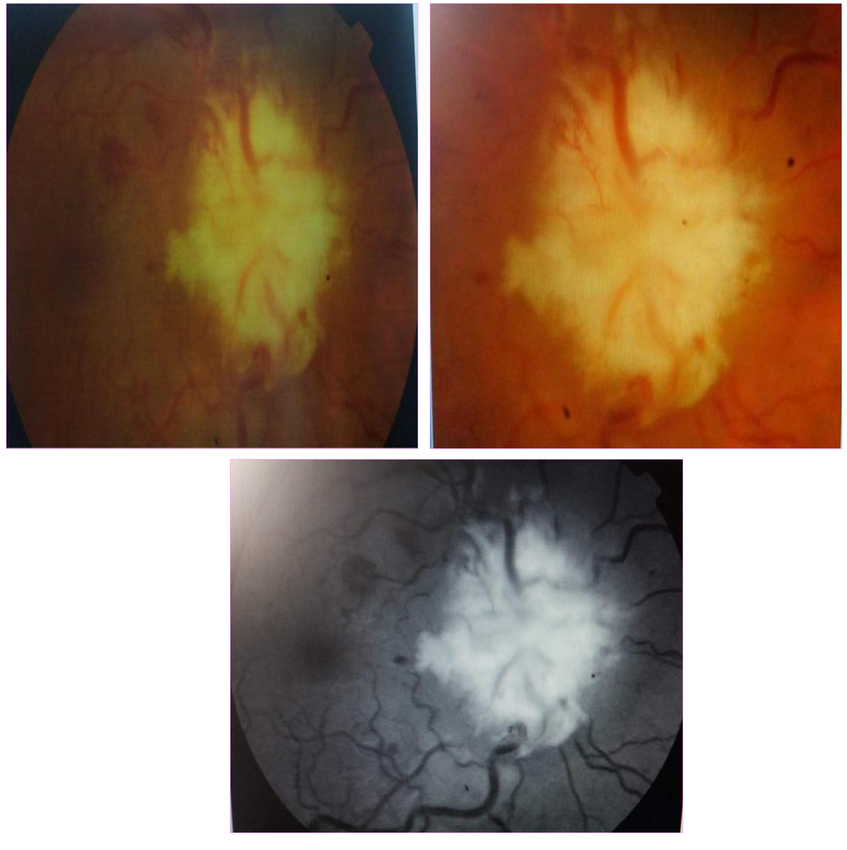


Figure (1): Right Optic disc infiltration

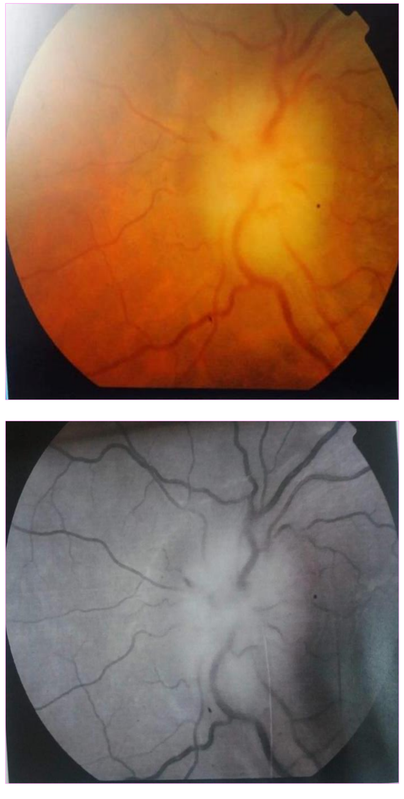


Figure (2): left Optic disc edema

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