



Choroidal Metastasis – A Diagnostic Dilemma in today's Era

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Purpose

To describe the clinical characteristics and multimodal imaging in a case of choroidal metastasis with extensive systemic metastasis.

Setting/Venue: - Sheikh Khalifa Medical City Ajman, United Arab Emirates

Methods

This study is a retrospective case report of a female patient. A 61-year-old female, one-eyed patient with symptoms of subacute visual loss and metamorphopsia diagnosed as wet age-related macular degeneration elsewhere was referred to our hospital for intravitreal anti-VEGF injection. Patient had a history of breast carcinoma 20 years back and a recent history of severe weight loss over 3 months and dysphagia. Patient had lost the right eye to a childhood trauma.

On examination, the best corrected visual acuity in the left eye was 6/36. Anterior segment examination was essentially within normal limits. On fundus examination, yellowish-white, elevated, diffuse lesions with irregular borders and retinal pigment epithelium changes were seen on the posterior pole.

Results

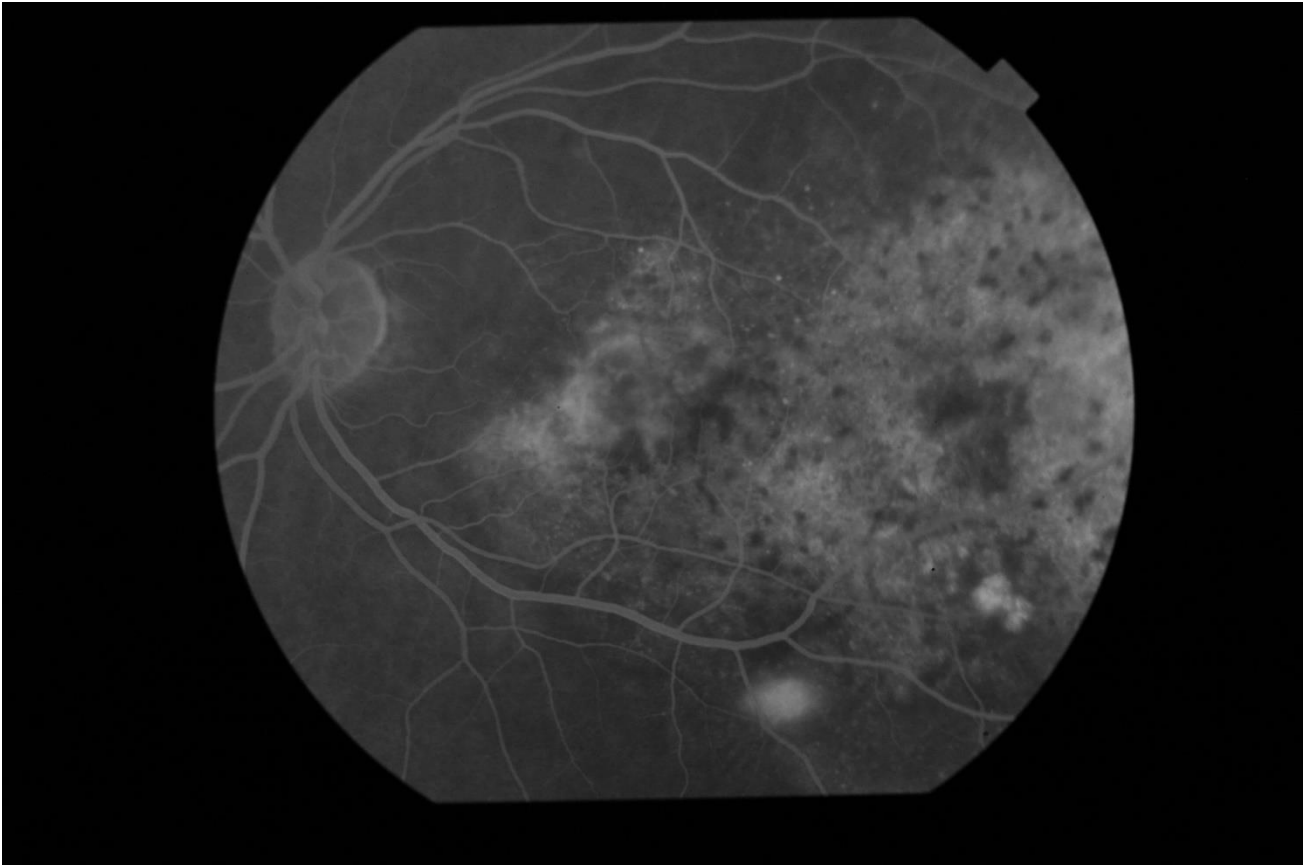
Optical coherence tomography revealed marked choroidal elevation with outer retinal abnormalities, disruption of the photoreceptor outer and inner segment junction and intraretinal fluid accumulation. Fundus fluorescein angiography revealed early window defects with massive leakage.

B-scan ultrasound showed a dome-shaped mass in the posterior pole with medium to high internal reflectivity with irregular internal structure.

Further investigations revealed an elevated serum carcinoembryonic antigen and CA 15-3.

CT scan of the neck showed a destructive lesion involving the squamous temporal on the left. MRI of the thoracic spine with contrast revealed multiple metastatic lesions with destructive wedge compression of L1 and L5 vertebral bodies.

Patient proceeded with the treatment as per the internist.



Conclusions

The incidence of choroidal metastasis in patients with systemic malignancies is estimated to be 5%.¹ Choroidal metastatic tumors present as yellowish white, elevated, diffuse lesions. Being commonly associated with serous retinal detachment and intraretinal fluid accumulation, they tend to be often misdiagnosed. Macular region being the richest in choroidal circulation, it is the most common place for the choroidal metastases.

Multifocal lesions are found in approximately 20% to 28% of cases.² Bilateral involvement has been reported in vast majority of the cases. ³

Diagnosis is challenging as it requires combining clinical features, detailed examination and adjuvant testing into a cohesive justification. Given their seemingly ubiquitous nature and increasing number, it is of paramount importance for clinicians to maintain a high index of suspicion. In a patient with suspected choroidal lesions and known history of malignancy, apt workup includes a detailed history and examination, and essential imaging studies.

References

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