Case report

Presumed choroidal metastasis from soft tissue myoepithelial carcinoma

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ABSTRACT

Purpose: To report a case of presumed choroidal metastasis from soft tissue myoepithelial carcinoma and highlight challenges in its diagnosis.

Observations: A 52-year-old man was referred with a two-week history of photopsia in his left eye. His background medical history included known soft tissue myoepithelial carcinoma metastatic to his bone, lung, liver and chest wall. A large, raised, yellow choroidal lesion was identified nasal to and abutting the optic disc. This lesion demonstrated growth 1 month after presentation. The patient died with widespread metastatic disease 5 months after initial presentation.

Conclusion and importance: Soft tissue myoepithelial carcinoma can rarely metastasise to the choroid and present as a rapidly-growing, yellow, echodense tumour with serous retinal detachment. MRI brain can assist in tumour evaluation and monitoring progression, while immunoperoxidase stains and molecular testing can assist with diagnosis. The condition has an aggressive natural history and poor prognosis.

Introduction

Metastases to the choroid are an uncommon presentation of metastatic malignancy, generally associated with advanced disease. The most common primary sites are the lung and breast. We describe a rare case of presumed choroidal metastasis from soft tissue myoepithelial carcinoma, and highlight features required to make this challenging diagnosis.

Report of case

A 52-year-old Caucasian male was referred with a six-week history of noticing flickering lights in his left eye. Visual acuities were 20/20 in both eyes. Anterior segment examination was normal, and the vitreous was quiet. A large (10mm diameter) raised yellow lesion was observed nasal to and abutting the left optic disc (Fig. 1A). The right fundus was normal.

Two weeks after initial presentation, he noticed a temporal shadow in his left eye. The lesion documented rapid growth by 4mm at 2 weeks (Fig. 1B) and 6mm at 4 weeks (Fig. 1C), when it was associated with an inferior serous retinal detachment. Although the lesion was isoautofluorescent, the areas of subretinal fluid were hyperautofluorescent (Optos PLC, Dunfermline, UK Fig. 1D). Optical coherence tomography (CIRRUS™ 5000 HD-OCT, Carl Zeiss Meditec AG, Jena, Germany) demonstrated subretinal fluid over the lesion and at the macula (Fig. 1E). Brightness-scan (B-scan) ultrasonography (Eye Cubed™, Ellex, Mawson Lakes, Australia) demonstrated an echodense lesion measuring 4.0mm in height with overlying and inferior subretinal fluid but no extraocular extension (Fig. 1F). Magnetic resonance imaging (MRI) scan of the brain (Sequences used: Three plane T1, T2, diffusion and susceptibility...
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elsewhere were consistent with a poorly differentiated soft tissue myoepithelial carcinoma in this case.

The prognosis of soft tissue myoepithelial carcinoma is poor. Current literature of patients treated with radiation and chemotherapy in recurrent and metastatic of soft tissue myoepithelial carcinoma have been reported to be unsuccessful.

Conclusion

In summary, we report a rare case of presumed choroidal metastasis from soft tissue myoepithelial carcinoma that presented as a rapidly-growing, yellow, echo-dense choroidal tumour with serous retinal detachment. The lesion is isoautofluorescent, but hyperautofluorescence can be seen in areas of subretinal fluid. MRI brain can assist in tumour evaluation and monitoring progression, while immunoperoxidase stains and molecular testing can assist with confirming this difficult to diagnose condition. It is important to include this condition in the differential diagnosis of choroidal metastases because one-third of choroidal metastases have no known primary at the time of presentation. Soft tissue myoepithelial carcinoma has a highly aggressive natural history, is resistant to current anti-neoplastic treatments and has a poor prognosis.

Patient consent

Patient consent: Patient provided both orally and written consent for the information gathered and the publication of his case. This report does not contain any personal information that could lead to identification of the patient.

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Conflict of interest

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Authorship

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References