

Figure 2 (a) OCT images of the left eye. (I) Left OCT shows central retinal edema, subretinal fluid, loss of foveal contour, and intense sub-RPE hyperreflectivity pigment suggesting occult CNV at initial presentation (I), 4 weeks after the first IVB (II) and 4 weeks after the second IVB injection (III). (b) Late-phase fluorescein angiography confirms complete resolution of central leakage in the left eye.

proposed that SIX5 and not DMPK is responsible for the ocular phenotype of DM.⁵ The non-penetrant inheritance of the macular dystrophy, might either indicate a digenic pattern where transcriptional silencing of the *SIX5* gene through expansion of CTG repeats occurs from one generation to the next through anticipation or it might indicate variable expressivity. Beyond the genetics, our observations show that deterioration of VA in patients with DM can be due to macular dystrophy and, rarely, CNVs. The rapid response to IVB provides evidence that VEGF has a role in this disease.

Conflict of interest

The authors declare no conflict of interest.

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Radiolabelled somatostatin analogue treatment in a case of carcinoid tumour with choroidal metastases

We describe a case of choroidal carcinoid metastases in a young patient and briefly address the considerations and controversy involved in selection of appropriate therapy.

Case report

A systemically well, 22-year-old female presented with blurred vision OS. Visual acuities (VA) were 6/5 OD and 6/6 OS. Anterior segment evaluation was normal OU.

Posterior segment examination confirmed a single, large, amelanotic, choroidal mass OS (6.8 mm ultrasound thickness) (Figure 1a) and two amelanotic choroidal lesions OD measuring 1.8 and 1.2 mm thickness. Systemic work-up revealed a solid mediastinal mass (Figure 2).

Fine needle biopsy of the choroidal lesion OS provided insufficient aspirate for diagnosis. Biopsy of the mediastinal lesion demonstrated typical bronchial carcinoid of low proliferative index (Ki-67 < 2%). Octreotide scintigraphy was performed 1 month following initial assessment. A functioning neuroendocrine tumour (NET) at the site of the right hilar mass (Figure 3a) in addition to a further site of active disease in the left sphenoid bone (Figure 3b) were demonstrated. Management decisions were made in conjunction with oncology and endocrinology services.

Intraretinal fluid accumulation at the left macula caused a reduction in VA to 6/18 OS 8 months following presentation. Neither intravitreal bevacizumab (1.25 mg in 0.05 ml) nor subsequent systemic treatment reduced this fluid.

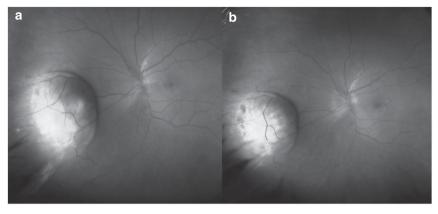


Figure 1 (a) Wide-field fundus photograph OS at initial assessment. (b) Wide-field fundus photograph OS post treatment.

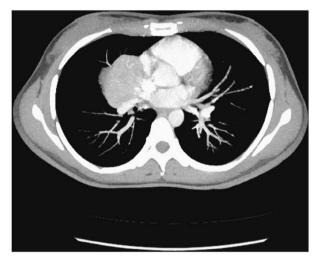


Figure 2 CT thorax demonstrating mediastinal mass.

At 13 months following diagnosis, four targeted (177) Lutetium-DOTA-octreotate treatments were administered over a 7-month period in a Swedish endocrine oncology unit. This was followed by a reduction from 6.2 to 5.9 cm in primary bronchial tumour diameter and from 10.4 to 8 mm in the left choroidal

metastasis (Figure 1b). There were no changes in the size of the choroidal metastases OD. At 39 months follow-up, VA was 6/5 OD, 6/30 OS and no new systemic or choroidal lesions had developed.

Comment

Response of choroidal carcinoid metastases to radiolabelled somatostatin analogues has not been described previously. A recent report of metastatic conjunctival carcinoid catalogued relentless tumour progression despite use of radiopharmaceuticals.¹ However, in a large case series of metastatic NETs, endoradiotherapy was shown to prolong the lives of treatment-responsive patients.² Haematological toxicities coupled with nephrotoxicity, which increases with successive treatments and over time, have the potential to limit the scope for retreatment.² External radiotherapy, reserved in this case for progressive disease, has also been used for surgically inaccessible NETs.³ Reports of long-term stability without treatment mean that choosing to observe rather than intervene is also a viable option in managing carcinoid metastatic to the choroid.^{3,4}

Conflict of interest

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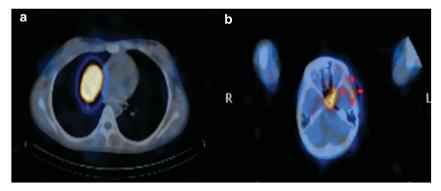


Figure 3 Octreotide scan demonstrating mediastinal (a) and sphenoid (b) lesions.

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Enhanced depth imaging spectral-domain optical coherence tomography of a subtle choroidal metastasis

Enhanced depth imaging (EDI) using spectral-domain optical coherence tomography (SD-OCT) has greatly improved visualization of the choroid. We report a case of a subtle, symptomatic choroidal metastasis where EDI SD-OCT was beneficial to the diagnosis.

Case report

A 62-year-old woman noted 2 weeks of gradual painless decreasing vision in her left eye (OS). She saw an ophthalmologist, who referred her to Wills Eye Institute for presumed central serous chorioretinopathy. Her past medical history was significant for stage IV lung carcinoma diagnosed 6 months previously, treated currently with chemotherapy. She had a brain metastasis treated with radiation therapy 3 months previously.

On examination, her visual acuity was 6/15 in the right eye (OD) and 6/60 in the left eye (OS). Anterior segment examination was normal. Dilated fundus examination was normal OD. Mottled retinal pigment epithelial (RPE) changes were noted superotemporal to the optic disc margin OS, with a shallow serous retinal

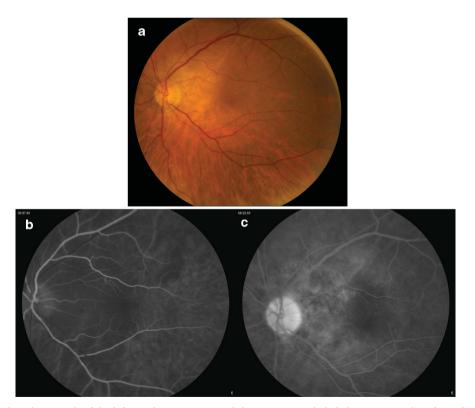


Figure 1 (a) Fundus photograph of the left eye demonstrating subtle pigment epithelial changes extending from the superotemporal disc margin and barely-perceptible subretinal fluid in the macula. (b) Early arteriovenous phase fluorescein angiogram of the left eye demonstrating delayed choroidal vascular filling temporal to the disc. (c) Late phase fluorescein angiogram of the left eye demonstrating mottled areas of punctate hyper- and hypo-fluorescence superotemporal to the disc, and faint mottled hyperfluorescence in the macula.