

occurred. The patient was discharged from regular review 18 months following initial presentation.

Discussion

Systemic anticoagulation rarely causes spontaneous intraocular haemorrhaging and does not require cessation prior to intraocular surgery.⁵

UGH syndrome appears to arise from repetitive mechanical iris trauma by a malpositioned or subluxed IOL.^{6–8} In our case, superior iris transillumination was noted and was likely due to chafing by a displaced haptic. Iris melanosomes have previously been isolated from haptic tips in this condition.⁹

The British Society for Haematology recommends an INR of 2.5–3.5 for patients with prosthetic heart valves. ¹⁰ Such patients remain at risk of spontaneous hyphaema where IOL malposition has occurred. Small incision phacoemulsification and a correctly positioned IOL will reduce this risk considerably.

References

- 1 Hagan JC. A comparative study of 91Z and other anterior chamber intraocular lenses. *Am Intraocular Implant Soc J* 1984; 10: 324–328.
- 2 Sharma A, Ibarra MS, Piltz-Seymour JR, Syed N. An unusual case of Uveitis-Glaucoma–Hyphaema syndrome. Am J Ophthalmol 2003; 135: 561–563.
- 3 Percival SBP, Das SK. UGH syndrome affecting posterior chamber lens implantation. *Am Intraocular Implant Soc J* 1983; 9: 200–201.
- 4 Van Liefferinge T, Van Oye R, Kestelyn P. Uveitis-glaucomahyphaema: a late complication of posterior chamber lenses. *Bull Soc Belge Ophthalmol* 1994; **252**: 61–65.
- 5 Katz J, Feldman MA, Bass EB, Lubomski LH, Tielsch JM, Petty BG et al. Risks and benefits of anticoagulant and antiplatelet medication use before cataract surgery. Ophthalmology 2003; 110(9): 1784–1788.
- 6 Taylor RH, Gibson JM. Warfarin, spontaneous hyphaemas and intraocular lenses. *Lancet* 1988; **1**(8588): 762–763.
- 7 Schiff FS. Coumadin related spontaneous hyphemas in patients with iris fixated pseudophacos. *Ophthalmic Surg* 1985; 16: 172–173.
- 8 Miller D, Doone MG. High-speed photographic evaluation of intraocular lens movements. Am J Ophthalmol 1984; 97: 752–759
- 9 Asaria RH, Salmon JF, Skinner AR, Ferguson DJ, McDonald B. Electron microscopy findings on an intraocular lens in the Uveitis–glaucoma–hyphaema syndrome. *Eye* 1997; **11**(6): 827–829.
- 10 Guidelines on oral anticoagulation: third edition. *Br J Haematol* 1998; **101**: 374–387.

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Sir, Orbital metastasis from a choroidal melanoma

Uveal melanomas are the most common intraocular tumours in adults and treatment of the lesion locally including radiation or enucleation does not prevent metastasis. The common sites of metastasis are the liver, lung, and bone. We present a case of metastasis to the contralateral orbit from a choroidal melanoma in a patient 10 years after successful treatment.

Case report

A 47-year-old female was referred to the ocular oncology clinic in 1992 with a history of photopsia for 4 months in the right eye associated with a reduction in visual acuity. There was no significant ocular or medical history. On examination, the visual acuity was 6/18 and 6/5 in the right and left eye, respectively. Anterior segment examination was normal. Fundus examination revealed a raised pigmented lesion, which was subfoveal in location. The lesion had overlying lipofuschin. The size of the lesion was 10.3 mm in basal diameter and 3 mm in thickness on B scan ultrasound. A diagnosis of choroidal melanoma was made and the patient was admitted and investigated to exclude any evidence of systemic metastasis.

The melanoma was treated with Ruthenium 106 plaque brachytherapy combined with two sessions of argon laser photocoagulation over the next 4 months. On subsequent visits, the vision in the right eye was counting fingers and the tumour was completely treated leaving a flat scar. The patient was followed up regularly with a dilated fundus examination and liver function tests to exclude local recurrence and systemic metastasis. In 1995, the patient developed a lump in her right breast for which she had an excision



biopsy, which was consistent with an 8 mm infiltrating duct carcinoma with all margins being clear of tumour. She subsequently had radiotherapy for the breast carcinoma. On subsequent visits, there was no evidence of recurrence of the choroidal melanoma or systemic metastasis.

On a routine clinic visit in 2002, the patient complained of decreased vision in her left eye associated with some loss of field and pain in the abdomen. She had also lost some weight in the last 4 months and had noted some skin nodules. On eye examination her visual acuity was counting fingers and 6/9 in the right and the left eye, respectively. There was evidence of proptosis in the left eye and exophthalmometry showed a 3 mm proptosis. Anterior segment examination was normal. Fundus examination of the left eye showed evidence of a swollen optic disc and choroidal folds in the macular area. There was no change in the fundal appearance of the right eye. A fundus flourescein angiogram and ICG angiography confirmed the swollen optic disc and choroidal folds (Figures 1a, b, c). A diagnosis of an orbital metastasis from the carcinoma of the breast was made and an urgent CT scan showed a $2.5 \times 2 \text{ cm}^2$ solid mass in the left orbit extending from the back of the globe to the superior orbital fissure (Figure 1d). There was also some pressure erosion of the lateral wall of the orbit. CT scan of the chest and liver showed a large metastasis in segment four

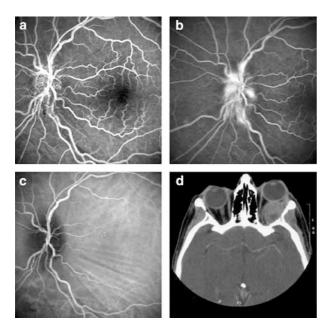


Figure 1 (a) Early fundus flourescein angiography (FFA) showing swollen optic disc and choroidal folds. (b) Late fundus flourescein angiography (FFA) showing optic disc swelling. (c) Indocyanine green angiography (ICG) showing swollen optic disc and choroidal folds. (d) Computerised tomography (CT) scan showing the orbital metastasis involving the left orbit.

of the liver, with smaller lesions in the rest of the liver, and a nodule less than 1 cm in diameter in the left lung.

An ultrasound-guided liver biopsy, was proposed but instead it was decided to biopsy the skin nodule from the left side of the scalp. The biopsy was consistent with metastatic malignant melanoma. The patient was referred for chemotherapy and radiotherapy. She received five cycles of DTIC along with radiotherapy but was noted to have progressively worsening disease with evidence of meningeal metastasis on CT scan in March 2003. She also developed a number of cutaneous and subcutaneous nodules along with involvement of the axillary nodes on the right side. She is receiving second-line treatment with cisplatin at present.

Discussion

Metastasis from a uveal melanoma to the orbit is rare, with only a few cases reported in literature.² Within 5 years of treatment of the primary tumour, 70% of the patients develop a clinically detectable metastasis and usually survive between 2 months and 5 years depending on whether they receive treatment on not.³ Late metastasis has also been reported with Coupland *et al*⁴ reporting a case of metastasis to the contralateral orbit 40 years after enucleation.

The common systemic malignancies metastasizing to the orbit include the breast and lung in females and the lung, prostrate, and kidney in males.⁵ In our patient, as she had a choroidal melanoma and a carcinoma of the breast, the more likely diagnosis of metastasis to the orbit from her breast malignancy was made initially but biopsy was consistent with metastasis from the choroidal melanoma. The patient on presentation to the clinic had all the symptoms and signs of orbital metastasis, which included a decrease in visual acuity in the good eye along with proptosis and evidence of pressure on the globe on fundus examination. Also, as previously reported, the orbital metastasis was the first clinical sign of systemic spread but on subsequent investigations she was found to have liver, lung and skin involvement.6

Treatment options for orbital metastasis depend on the primary. Chemotherapy and radiotherapy is the mainstay of treatment. In cases of metastasis from the breast hormonal therapy and orchiectomy for prostrate carcinoma may be indicated. Choroidal metastasis has been treated by resection (subtotal or total), orbital decompression or observation combined with the radiation or chemotherapy.^{6–8}

In this case due to the large size of the metastasis it was decided not to resect the metastasis. This case illustrates that in cases of metastasis to the orbit in a patient with twin systemic malignancies, it is



important to establish the source of the metastasis. This can be instrumental in planning the treatment in that patient.

References

- 1 Shields JA, Shields CL. Management of posterior uveal melanoma. In: Shields JA, Shields CL (eds). *Atlas of Intraocular tumors*. Lippincott, Williams and Wilkins: Philadelphia, PA, 1999, pp 114–139.
- 2 Goldberg RA, Rootman J, Cline RA. Tumors metastatic to the orbit: a changing picture. Surv Ophthalmol 1990; 35: 1–24.
- 3 Gragoudas ES, Egan KM, Seddon JM. Survival of patients with metastasis from uveal melanoma. *Ophthalmology* 1991; **98**: 383–390.
- 4 Coupland SE, Sidiki S, Clark BJ, Mc Claren K, Kyle P, Lee W. Metastatic choroidal melanoma to the contralateral orbit 40 years after enucleation. *Arch Ophthalmol* 1996; 114: 751–756.
- 5 Shields CL, Shields JA, Peggs M. Metastatic tumors to the orbit. *Ophthalmic Reconstr Plast Surg* 1988; 4: 73–80.
- 6 Shields JA, Perez N, Shields CL, Singh AD, Eagle Jr RC. Orbital melanoma metastatic from contralateral choroid: management by complete surgical resection. *Ophthalmic Surg lasers* 2002; 33: 416–420.
- 7 Abramson DH, Servodidio CA. Metastatic choroidal melanoma to the contralateral orbit 40 years after enucleation. *Arch Ophthalmol* 1997; 115: 134.
- 8 Bowling BS, Domato BE, Foy PM. Choroidal melanoma metastatic to the contralateral orbit: Implication for patient management. *Eye* 1998; **8**(1): 144–145.

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Sir,

Ocular Angiostrongyliasis: removal of a live nematode from the anterior chamber

Recovery of a parasite from the anterior chamber of the eye is a rare event despite the fact that some nematode infections such as onchocerciasis and toxocara are common in certain geographical locations around the world.¹ We report a case of ocular Angiostrongyliasis in

which a live, motile nematode was seen swimming in the anterior chamber, and subsequently successfully removed from the eye.

A 33-year-old white South African man presented with a 2-day history of a painful, red right eye. He had also noticed floaters in the right eye for 5 days. He was in good general health and denied general malaise or headaches.

On ocular examination his visual acuity was 6/9 in the right eye and 6/5 in the left eye. In addition, anterior uveitis with 2+ inflammatory cells together with a live worm (Figure 1) was noted in the right eye. Intraocular pressure in the right eye was elevated at 34 mmHg. The nematode was removed intact using an irrigating/ aspirating cannula through a paracentesis. The patient was treated with Gt Pred forte 1% 2 hourly, Gt Chloramphenicol four times a day, and Gt Levobunolol twice daily. The drops were tapered and stopped 4 weeks after surgery as the intraocular pressure and inflammation settled. Posterior segment examination showed white sub-retinal marks in the inferonasal periphery of the right eye but visual acuity was 6/6. There was no associated vitreous activity, and the appearance remained unchanged at the final follow-up (4 months).

The patient was referred to a tropical diseases unit for systemic review, and the nematode was sent to parasitologists for identification. No evidence of systemic parasitic infection was found. The worm was identified as an immature female of *Angiostrongylus cantonensis* (Figure 2), a round worm measuring 22.0 mm in length and 0.35 mm in diameter.

Angiostrongyliasis most commonly occurs in Southeast Asian countries and has been reported from Taiwan, Thailand, Indonesia, Vietnam, Papua New Guinea, Japan, and Sri Lanka. On reviewing the



Figure 1 The worm in the anterior chamber of the right eye.