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CORRESPONDENCE

Sir,

Bidirectional thermotherapy for choroidal melanoma

An 81-year-old male had recurrence of choroidal melanoma after three sessions of transpupillary thermotherapy (TTT) and double freeze-thaw cryotherapy once over a 7-year period. At initial presentation in 2003, the melanoma had a thickness of 1.9 mm without scleral extension or involvement of ciliary body or optic nerve. He refused plaque brachytherapy because he was monocular since childhood after enucleation secondary to trauma. Initial treatment therefore was TTT followed by transscleral cryotherapy at 4 months later. Recurrences in 2007 and 2009, heralded by increased pigmentation at the edge of previously treated areas, were treated with repeat TTT.

Visual acuity was 20/25 in 2010 at the time of the most recent recurrence (Figures 1a and b). There was no evidence of extrascleral extension or metastases. The patient again declined plaque brachytherapy because of concerns regarding vision loss. He underwent intraoperative TTT with concurrent transscleral diode laser thermotherapy (TDT). TDT was carried out using indirect ophthalmoscopy and 80-s duration exposures. The power was titrated to achieving a grey colour to the retina. No complications occurred. By the following day, a mildly grey colour was seen to the retina (Figure 1c).

Extrascleral extension of melanoma cells is a leading cause of failure in TTT.[1] TTT may not penetrate the depth of the melanoma completely in some cases, resulting in residual viable melanoma cells usually in the outermost scleral aspect of the mass. The addition of TDT may complement TTT in achieving necrosis of melanoma cells in the outermost portion of the melanoma or even in the infiltrating scleral portions that are undetectable by ultrasound. Cryotherapy following TTT has also been applied using this concept but has been unsuccessful.[2] TDT has been shown to not disrupt scleral architecture.[3–5] Bidirectional thermotherapy with TDT with TTT could result in a 'sandwich' treatment in both the anterior-to-posterior and posterior-to-anterior directions.

Our patient has unique characteristics because of his ocular history and refusal of plaque brachytherapy, therefore requiring a novel approach to choroidal melanoma treatment. Bidirectional thermotherapy may decrease the risk of extrascleral extension in selected patients with choroidal melanomas amenable to TTT.

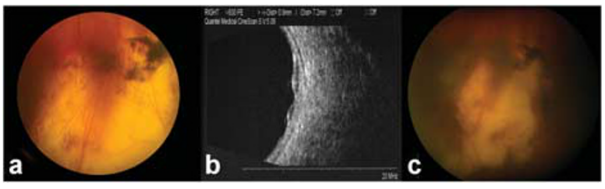

Figure 1 (a) Increased pigmentation at border of previous TTT for choroidal melanoma. (b) Ultrasound revealing bilobed elevation without evidence of scleral extension. (c) Postoperative photo after bidirectional thermotherapy showing grey area over treatment area.

Conflict of interest

The authors declare no conflict of interest.

Acknowledgements

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Sir,

A rare case of *Aspergillus terreus* endogenous endophthalmitis in a patient of acute lymphoid leukemia with good clinical outcome

Endogenous fungal endophthalmitis is associated with immunocompromised states, indwelling catheters, chemotherapy, intravenous drug abuse, and organ transplantation.[1] The most common causative organism is *Candida albicans*.[1] Among the *Aspergillus* species *A. flavus*, *A. fumigatus*, or *A. niger* are common. *Aspergillus terreus* is very rare.[2–4] The outcomes in *A. terreus* endophthalmitis are generally poor.[2,3] We report a case of *A. terreus* endogenous endophthalmitis in a patient with acute lymphoid leukemia with good response to treatment.

Case report

A 33-year-old female presented with decreased vision in her left eye since 6 days. She is a patient of acute lymphoid leukemia and on chemotherapy. Six weeks

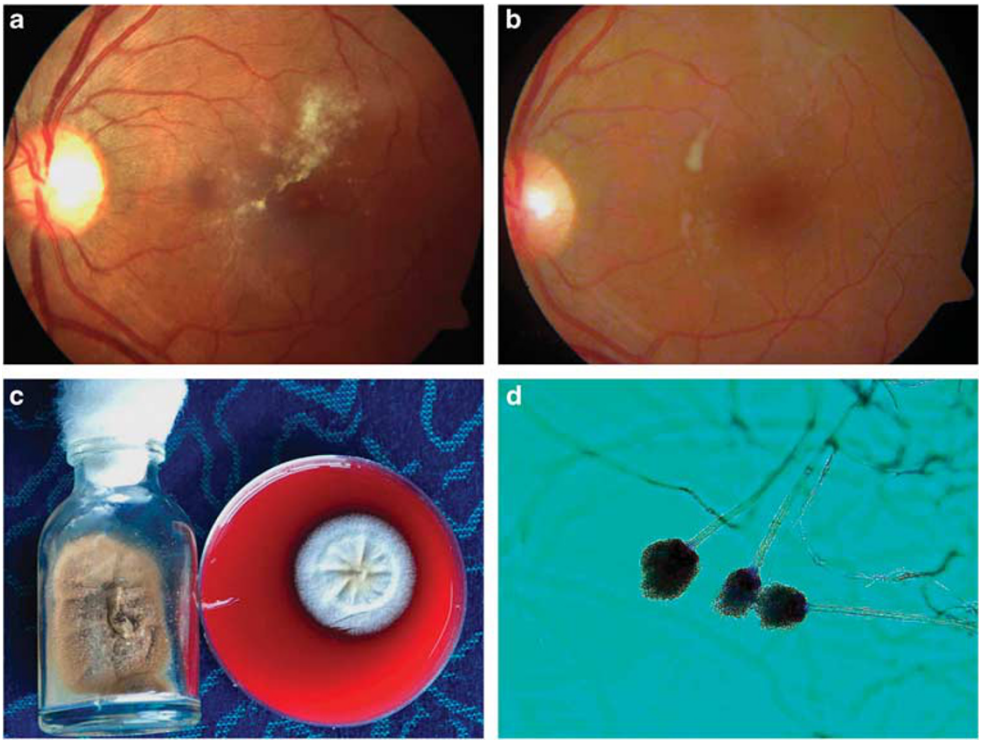

Figure 1 (a) Left eye color fundus photograph showing whitish exudates over the macula area with overlying vitreous exudation. (b) Left eye color fundus photograph at 14th post treatment day showing resolved vitreous exudates and macular edema. (c) Potato dextrose agar and blood agar showing furrowed velvelty cinnamon colored powdery growth suggestive of *Aspergillus terreus*. (d) Lactophenol cotton blue slide culture mount showing filamentous fungi with long conidia on segmented steria covering only the top of the vesicle of the conidiophore confirming the fungus as *Aspergillus terreus*.

ago, she had treatment for Candida septicemia. Her latest bone marrow and peripheral smear examination revealed morphological remission. The patient had cervical lymphadenopathy and an indwelling femoral vein catheter. The examination of the right eye was normal. The vision in right eye was 6/6 and in the left eye was 6/24. The left eye showed whitish exudates in the macula area with overlying vitreous exudation and 1+ vitreous cells (Figure 1a).

A presumptive diagnosis of early fungal endophthalmitis was made. A posterior vitreous biopsy was taken using a single 23G port and intravitreal vancomycin, ceftazidime, and amphotericin B injections were given. The vitreous sample was positive for fungal DNA. The growth on culture (Figure 1c) and a lactophenol cotton blue culture mount showed *A. terreus* (Figure 1d). The patient was started on 5% natamycin eye drops eight times per day, homatropine 2% eye drops three times per day and oral ketoconazole 200 mg twice daily. The 14th day follow-up showed absence of cells in the vitreous with resolved exudates and the final visual acuity was 6/6 in her left eye (Figure 1b).

Comment

Our patient has risk factors of immunocompromised state, indwelling catheter, and chemotherapy. *A. terreus* endophthalmitis is a very rare form of endogenous endophthalmitis. High clinical suspicion and sample taken from the exudates in the posterior pole through single 23G port helped in isolation of the fungus. Prompt institution of antifungals resulted in good clinical outcome. Use of newer azoles like voriconazole should also be kept in mind.[5]

Conflict of interest

The authors declare no conflict of interest.

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Sir,

Phacoemulsification with therapeutic implantation of a prosthetic iris device following peripheral iridotomy visual complication

Persistent visual disturbances occur in 2.7–7%[1,2] of patients following laser peripheral iridotomy (LPI). Prosthetic iris devices (PIDs) are used to reduce glare in congenital and acquired cases of iris deficiency.[3] We report a therapeutic use of endocapsular PID for relief of these symptoms in a patient with occludable angles following LPI.

Case report

A nanophthalmic, 60-year-old gentleman developed linear photopsia following LPI in his OD. Acuities were 6/60 OD and 6/6 OS. His OD was amblyopic and had early nuclear sclerosis. The LPI was covered by the superior eyelid in the primary position of gaze (Figure 1). His symptoms were exacerbated by up gaze and resolved when the superior lid was pulled downward. He could not tolerate peripheral opaque contact lenses.[4] Corneal tattooing[5] was not a viable option in the UK as sterile ink was no longer approved for human use. He agreed to undergo phacoemulsification with intraocular lens (IOL) and Morcher ring (Type 50C, Morcher GmbH, Stuttgart, Germany) implantation despite having minimal cataract with little visual improvement potential. Following a routine phacoemulsification and IOL implant, a single PID was inserted and dialled into position. Intracameral acetylcholine was injected to constrict the pupil and allow accurate placement of the opaque leaf of the ring.

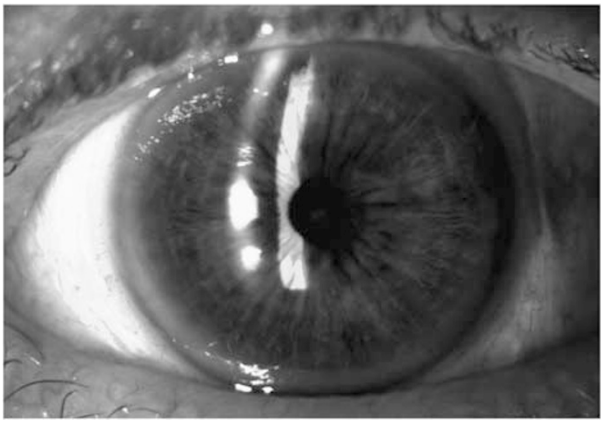

Figure 1 Peripheral laser iridotomy placed at 12 o'clock before surgery.

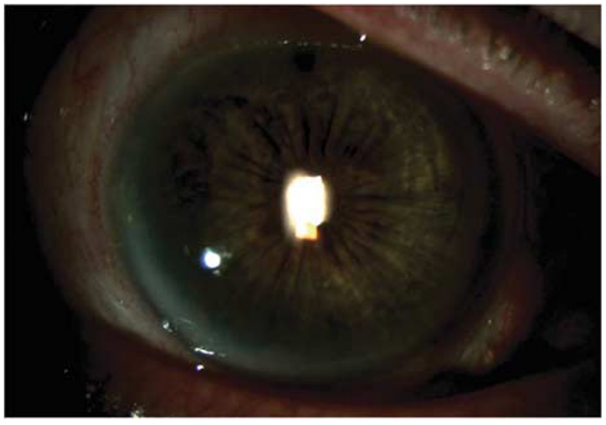

Figure 2 The iridotomy appears completely covered and cannot be seen by retroillumination after the implantation of the Morcher ring in the capsular bag.

At 1-month follow-up, his visual acuity was 6/36 (Figure 2) and his symptoms had completely resolved.

Discussion

Persistent visual disturbances are more common when LPI is placed at the level of the upper lid margin-tear film interface. LPI should be entirely placed under the upper lid, usually at 12 o'clock, or in a fully exposed area when the lid margin is located directly at the limbus. A single PID ring was sufficient to cover the iridotomy. We had difficulties in dialling the PID accurately to cover the iridotomy despite intracameral acetylcholine. We recommend marking the site of the iridotomy at the slit-lamp before pupil dilation. In summary, the implantation of a PID is a good therapeutic alternative to tinted contact lenses, corneal tattooing, and suturing of the iridotomy in patients with glare post LPI.

Conflict of interest

The authors declare no conflict of interest.

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