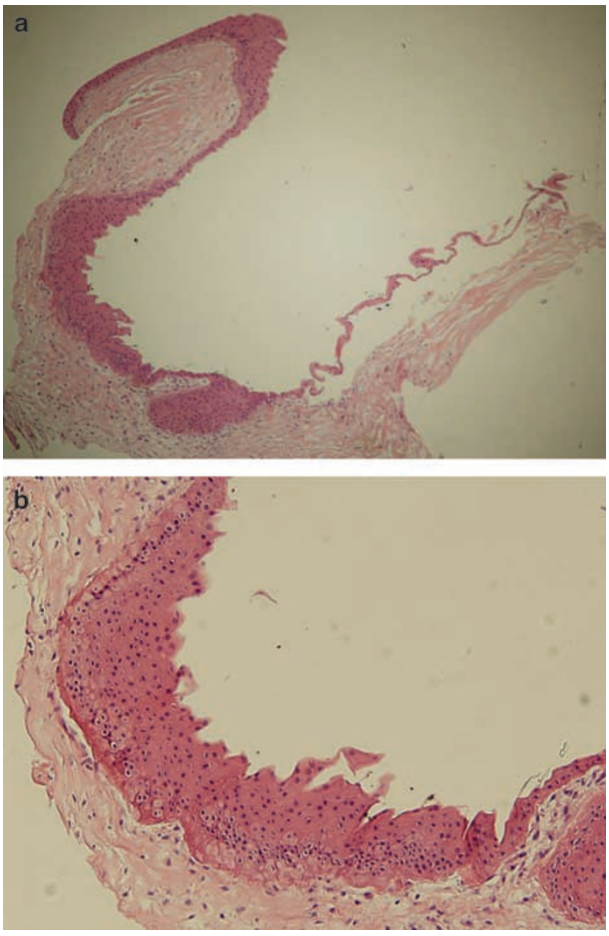

Figure 2 (a) Histopathology of the excised corneal tissue shows increased epithelial cells without surface maturation. There is no inflammatory reaction within the epithelial or stromal layers (haematoxylin–eosin staining; ×40 magnification). (b) Histopathology of the excised corneal tissue reveals a slight loss of polarity of the epithelial cells; however, neither cellular atypia nor dyskeratosis is noted (haematoxylin–eosin staining; ×100 magnification).

in the right eye. After 3 years of treatment, the lesion had completely regressed and did not recur per slit-lamp examination (Figure 3).

Comment

Corneal epithelial dysmaturation tends to exclusively involve the corneal epithelium or involved it in an amount disproportionately large compared with the conjunctiva or limbus.[1,2] Unilateral central corneal epithelial dysmaturation is an extremely unusual group of conditions, which are characterized by the involvement of corneal epithelium only or a disproportionate involvement of the corneal epithelium from a small limbal lesion that has preferentially spread towards the cornea. Epithelial dysmaturation is a benign and indolent process. Lesions may be unilateral or bilateral, stationary or slowly progressive, and may wax and wane spontaneously. Sometimes the opalescent islands and fingers spread over the corneal epithelium

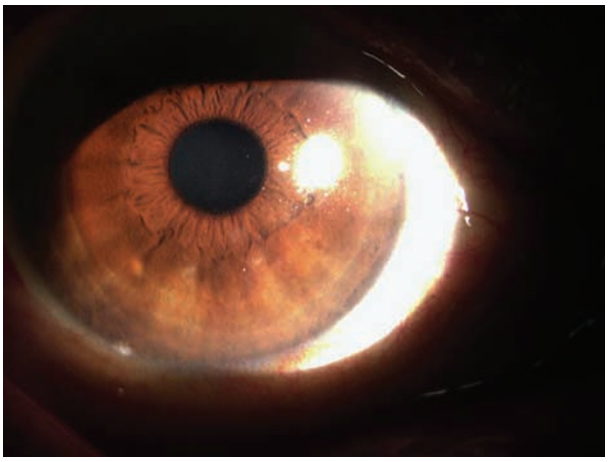

Figure 3 Right anterior segment view at the last visit. At 3 years after treatment, the lesion had completely regressed and showed no sign of recurrence.

and can be mapped geographically over the course of months to years.[1] Fortunately, these lesions are indolent and can be treated with simple corneal scraping and, if needed, wide excision of limbal components as with CIN. We report an unusual case of corneal epithelial dysmaturation. It appears that simple superficial excision may be an effective treatment for corneal epithelial dysmaturation.

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Sir,

Iris naevus with recurrent spontaneous hyphema simulating an iris melanoma

Hyphema associated with an iris naevus suggests malignant transformation.[1,2] Here, we report a case of iris naevus with recurrent spontaneous hyphema simulating an iris melanoma.

Case report

A 58-year-old female patient presented with blurred vision in the right eye because of a recurrent hyphema.

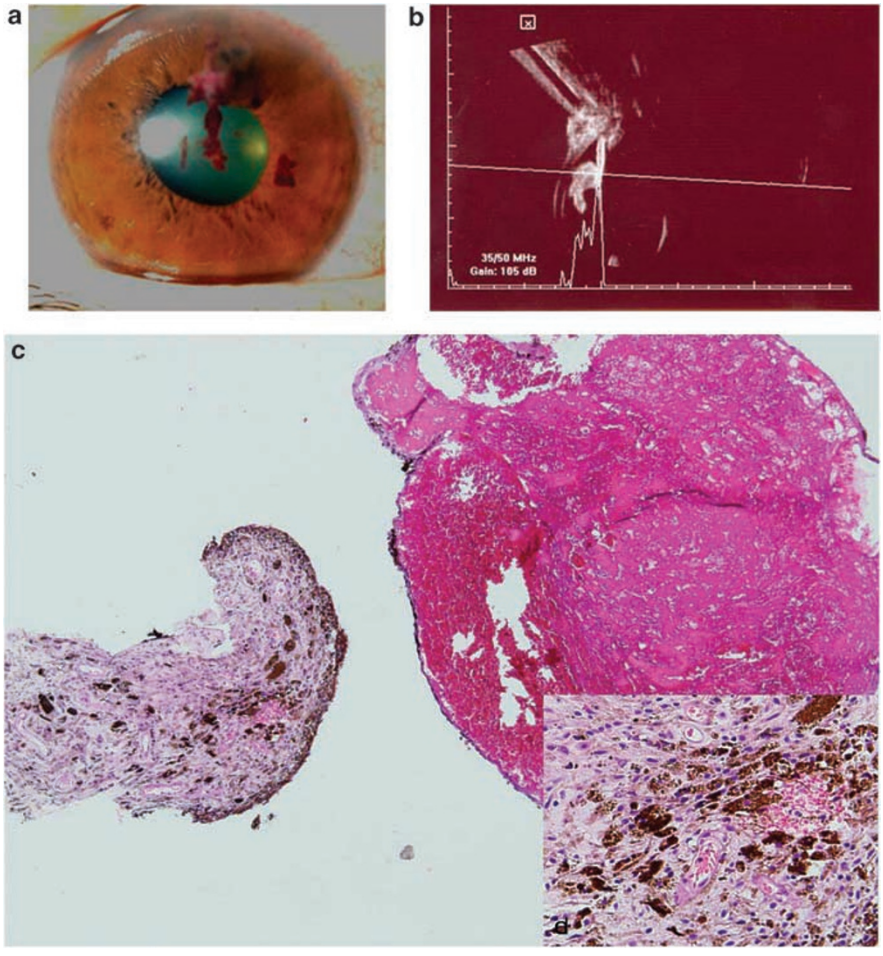

Figure 1 (a) Slit-lamp photograph at initial presentation showing a brown pigmented iris mass with corneal touching and haemorrhage hanging down. (b) Ultrasound biomicroscopy of solid iris tumour showing low internal echogenicity. (c) Histopathologic examination of the excised iris tumour with blood clot (hematoxylin-eosin stain, 12.5 × magnification). Inset (hematoxylin-eosin stain, 100 × magnification) shows scattered cells with round bland-looking nuclei and abundant heavily pigmented cytoplasm consistent with the melanocytic naevus.

Visual acuity was 20/60, and intraocular pressure was 14 mmHg. Five days later the hyphema cleared, and vision improved to 20/30. Slit-lamp examination revealed a brown coloured tumour at the 12 o'clock position, located in the middle portion of the iris touching the cornea. There was hyphema originating from the lesion (Figure 1a). Ultrasound biomicroscopy showed a $3.47 \times 2.02 \times 2.22$ mm-sized solid iris mass without involvement of the ciliary body or the anterior chamber angle (Figure 1b). Fundus examination was unremarkable. A week later, the patient visited our clinic with decreased visual acuity (20/400) and a recurrent hyphema from the iris tumour. Orbital MRI showed an enhancing lesion at the level of the iris in the corresponding meridian. Oncologic evaluation disclosed no abnormalities suggesting a metastatic source. We suspected an iris melanoma with secondary bleeding. Tumour removal by transcorneal excisional sector iridectomy and iridoplasty with a modified McCannel suture technique using 10-0 polypropylene (Prolene) were performed.

Histopathologic examination of the iris revealed scattered cells having round bland-looking nuclei and abundant heavily pigmented cytoplasm consistent with the diagnosis of a melanocytic naevus (Figure 1c). The patient regained 20/30 visual acuity, and at 6 months post-operatively had not developed additional complications.

Comment

It is estimated that 4–5% of suspicious iris naevi transformed into malignant melanomas.[3] Clinical parameters most predictive of malignant potential on melanocytic iris tumours include larger tumour size, secondary glaucoma, pigment dispersion, prominent intralesional vasculature, tumour-related symptoms, and documented enlargement of the lesion.[4] Photocoagulation may be an option to control recurrent hyphema in a benign naevus.[5] In our case, largest basal tumour diameter greater than 3 mm, presence of pigment

dispersion, and tumour-related symptoms gave rise to the possibility of an iris melanoma. Our patient demonstrated that iris naevus can present with recurrent spontaneous hyphema.

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Sir,

Pars plana vitrectomy and lensectomy for a nanophthalmic cataract

Cataract extraction in the nanophthalmic eye offer challenges in management because of potential difficulties encountered during the operation and the risk of postoperative complications. Various surgical methods have been described including extracapsular cataract extractions with/without sclerostomies and phacoemulsification. We present a case of cataract extraction in a nanophthalmic eye with par plana vitrectomy, lensectomy, and C_3 F_8 tamponade.

Case report

A 41-year-old Asian female patient with nanophthalmos, chronic narrow-angle glaucoma, microcornea, high hypermetropia ($+17.00$ DS OD, $+16.00$ DS OS), congenital nystagmus, and crowded optic discs presented with poorly controlled glaucoma despite having peripheral iridotomies and iridoplasty. Despite maximum medical treatment in the right eye, she underwent trabeculectomy with mitomycin C and inferior sclerostomies. Four months post-trabeculectomy, she developed a very shallow anterior chamber with iridocorneal touch paracentrally (Figure 1), 360 degrees posterior synechiae, and dense white cataract with visual acuity of perception to light. She was referred to the vitreoretinal service for the management of her cataract and she underwent a right pars plana vitrectomy, lensectomy through pars plana approach, posterior capsulectomy and anterior capsulotomy, and cryotherapy and tamponade with 12% C_3 F_8. Cryotherapy and gas tamponade were performed for entry site breaks. We used long-acting gas tamponade, as the patient was 6 weeks postpartum and positioning would have been difficult. Even after a generous anterior capsulotomy, she developed dense anterior capsular phimosis, which precluded the view of the retina, and subsequently she underwent a capsulectomy through the pars plana approach. At her last follow-up, 2 months after cataract extraction, her vision was counting fingers without aphakic correction. She had stable intraocular pressure and her retina was attached without choroidal effusion.

Comment

Nanophthalmos is a rare condition characterised by thickened sclera, small corneal diameter, crowding of the anterior chamber, and high hypermetropia causing patients to be at risk of angle-closure glaucoma.[1,2] These eyes have axial lengths that measure 20 mm or less, usually two standard deviations below the mean.[3]

Cataract surgery in nanophthalmos eyes can be a definitive treatment for angle-closure glaucoma. Pentacam and ultrasound biomicroscopy images, as analysed by Sharan *et al*,[4] showed an increase in anterior chamber volume, depth, and opening of the angles after extraction of cataracts from nanophthalmic patients.

Sclerostomies were made 3 mm from the limbus, which required treatment for entry site breaks. The use of gas tamponade may have been advantageous in this case in preventing uveal effusion. Superior bulbar conjunctiva was preserved as there was a functioning bleb.

Other approaches, such as extracapsular cataract extraction, carry the risk of uveal effusion postoperatively, even with prophylactic sclerostomies. Prophylactic measures to reduce risk of uveal effusion include oral steroids, intravenous acetazolamide, and mannitol preoperatively and operative sclerotomies to release suprachoroidal fluid.[5,6]

The management of cataract extraction through pars plana vitrectomy with gas exchange can be successful in selected cases, without complications such as uveal effusion that are seen with extracapsular cataract extraction method.