been found within and adjacent to sarcoid granulomas.[6] Meyer *et al*[7] have shown that macrophages from bronchoalveolar lavage in patients with active pulmonary sarcoid produce higher levels of angiogenic cytokines than do macrophages from normal patients, patients with other lung disorders, or those with inactive sarcoidosis. This was corroborated by Tolnay *et al*[6] who identified the increased transcription and production of vascular endothelial growth factor (VEGF) in activated alveolar macrophages in patients with pulmonary sarcoidosis. Sarcoidosis has been documented to result in microangiopathic lesions in various other organs,[8] where activated monocytes and macrophages have upregulated transcription of VEGF. Tripathi *et al*[9] have shown that VEGF levels are elevated in the aqueous of patients with other causes of NVG. These findings would support the idea of ocular granuloma formation and subsequent production of VEGF being associated with new vessel proliferation in sarcoid-related uveitis.

The chronic, aggressive granulomatous inflammation seen in our patient with sarcoidosis may have provided the angiogenic substrate to induce iris and angle neovascularisation in the absence of retinal ischaemia. We recommend careful iris and gonioscopic examination for the presence of new vessels in those with chronic inflammation secondary to sarcoidosis whose elevated IOP has been put down to secondary open angle glaucoma on the basis of inflammation or steroid response.

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Sir,

Spontaneous resolution of a choroidal mass

A case of spontaneous regression of a choroidal mass is presented.

Case report

An 80-year-old male was referred to the Ocular Oncology service from a tertiary referral centre in March 2003 with a 2-month history of floaters. He had been noted to have a large choroidal lesion in the superior periphery of the left eye (Figure 1a). On ultrasonography, the lesion demonstrated choroidal thickening with low internal reflectivity, suggestive of choroidal melanoma (Figure 1b). Past ocular history included bilateral uncomplicated phacoemulsification with the left eye surgery in October 2001. He was suffering from chronic obstructive pulmonary disease and had a myocardial infarction in 1972 and was on aspirin, inhalers, lansoprazole, and frusemide. There was no history of systemic malignancy.

On examination, 4 weeks after referral, visual acuity was 6/9 in both eyes. Anterior segment examination was normal with bilateral pseudophakia and an intraocular pressure of 14 mm Hg in both eyes. Dilated fundus examination of the right eye was normal. Fundus examination of the left eye showed normal optic disc and macula with areas of widespread retinal pigment epithelial (RPE) disturbance in the superior quadrant,

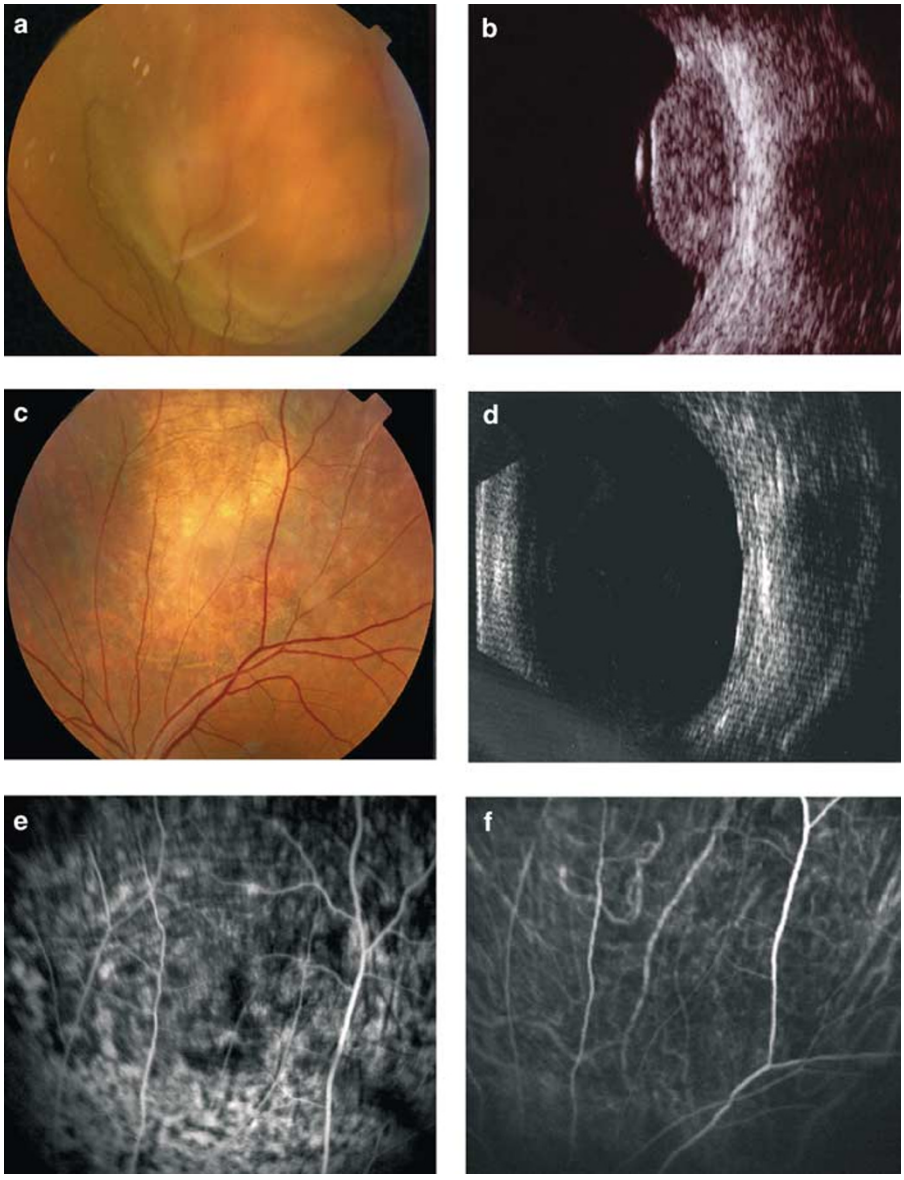

Figure 1 (a) Coloured Fundus photograph () showing a choroidal mass in the superior fundus of the left eye at referral. (b) B-scan ultrasound on referral (February 2003) showing a choroidal mass with choroidal thickening and low internal reflectivity. (c) Coloured fundus photograph (March 2003) on examination showing RPE disturbance with central atrophy. (d) Fundus fluorescein angiography (March 2003) showing window defects corresponding to the areas of RPE disturbance. (e) Indocyanine green angiography (March 2003) showing normal choroidal vasculature.

with central RPE atrophy (Figure 1c). Horizontal striae were also noted along the posterior end of the lesion.

On B-scan ultrasonography, there was mild irregular thickening of the choroid. Fundus fluorescein angiography showed window defects corresponding to the area of RPE atrophy (Figure 1d) and mild obscuration of the choroidal vasculature on indocyanine green angiography (Figure 1e). No choroidal mass could be demonstrated.

A diagnosis of spontaneously resolved choroidal mass of the left eye was made. Diagnostic possibilities included posterior scleritis, limited suprachoroidal haemorrhage, varix of vortex vein ampulla, and uveal melanoma.

Discussion

The common fundal mass lesions, which could resolve spontaneously, include suprachoroidal haemorrhage and

posterior scleritis. Other entities like varix of vortex vein ampulla are observed intermittently implying spontaneous resolution. Extremely unusual cases of spontaneous regression of choroidal melanoma have been reported.[1,2] Even though these lesions can be differentiated routinely based on clinical examination combined with investigations including B-scan ultrasound and angiography, sometimes they can be a diagnostic dilemma.

Localized suprachoroidal haematoma can be precipitated by hypotony, inflammation, trauma, and vascular disease and can also occur spontaneously in the elderly.[3] They are usually due to the rupture of posterior ciliary arteries with resultant haematoma in the suprachoroidal space. Delayed suprachoroidal haemorrhage after cataract surgery is believed to be prolonged hypotony or it may be a small haemorrhage that might stop bleeding initially and rebleed later.[4]

Posterior scleritis may present as deep orbital pain and is commonly associated with evidence of cells in the vitreous. On B-scan ultrasound, there is evidence of lucency adjacent to the thickened sclera. These features were absent in our patient making it unlikely for it to be posterior scleritis.

Varix of vortex vein ampulla (VOVA) is undue prominence of the vortex vein ampulla due to positional kinking of the extrascleral portion of the vortex vein in a middle-aged person.[5] VOVA demonstrates positional variations and is usually seen in the nasal equatorial regions. Extensive RPE disturbance in the superior quadrant and horizontal striae are not seen in association with VOVA.

The referring diagnosis in this case was a possible choroidal melanoma as the lesion was acute (not noted at the time of cataract surgery 2 years previously), symptomatic (causing floaters), raised on B-scan ultrasound and had low internal reflectivity.

As our patient had uncomplicated cataract surgery 2 years previously and there was complete spontaneous resolution of the choroidal mass within 6 weeks of initial presentation, we believe that our case represents spontaneous resolution of a limited suprachoroidal haemorrhage.

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Sir,

Exudative bullous retinal detachment after peripheral blood stem cell transplantation

Haematopoietic stem cell transplantation (HSCT) including peripheral blood stem cell transplantation (PBSCT) and bone marrow transplantation (BMT) is now well recognized as the curative treatment modality for severe aplastic anaemia and haematological malignancy. However, HSCT is associated with several complications. These result from the side effects of the treatment regimen such as high-dose chemotherapy, steroid treatment, and irradiation that induced pancytopenia after transplantation, and that of the immune reaction like graft-versus-host disease (GVHD).[1] The ocular complications of the anterior segment after BMT are common while those of the posterior segment are not frequently reported. The most commonly reported posterior segment complications are either intraretinal or vitreous haemorrhages according to the literatures.[2] We present two cases of exudative bullous retinal detachment (RD) in two patients after PBSCT who develop severe and potentially vision-threatening complications. Since our two cases died shortly after the diagnosis, bullous RD may be a poor prognostic factor for survival after PBSCT.