

older patients, this disruption is usually related to a posterior vitreous detachment. As posterior vitreous detachment is uncommon in young patients with premacular gliosis, the means of glial cell access to the inner limiting membrane surface in this age group is less well understood.⁵

We therefore suggest that (ocular) tuberose sclerosis may be an uncommon association in young patients with premacular gliosis without another identifiable cause.

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Sir,

Unexpected visual improvement with a pinhole in central retinal artery occlusion and cilio-retinal artery sparing fovea

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Visual loss due to intra-retinal pathology is not generally expected to improve with the use of a pinhole, while it is expected so, for media opacities and refractive errors. We herein report a case where we noticed visual improvement with the use of a

pinhole in the presence of a central artery occlusion and foveal sparing due to a cilio-retinal vessel.

Case report

A 62-year-old male patient with type 2 diabetes and hypertension, presented to his optician at 3 hours after sudden onset of painless loss of vision in the LE. The visual acuity recorded at the optician was RE 6/6 and LE 6/12. He was noticed to have 'contracted' visual fields. The patient was referred to the Eye casualty, Princess Alexandra Eye Pavilion, Royal Infirmary, Edinburgh as a suspected case of central artery occlusion LE.

He was seen in the eye Casualty 4 h later when the vision in the LE had dropped to 3/60, N36. It was noticed that the vision improved with a pinhole to 6/6 in the LE. Three experienced ophthalmologists using different Snellen acuity charts independently verified this. There was a left afferent pupillary defect and fundus examination revealed a central retinal artery occlusion with a cilio-retinal artery sparing the fovea (Figure 1a). Retinoscopy did not reveal any refractive error and no improvement was seen with the addition of plus lenses. A Humphrey's 24-2 full threshold visual

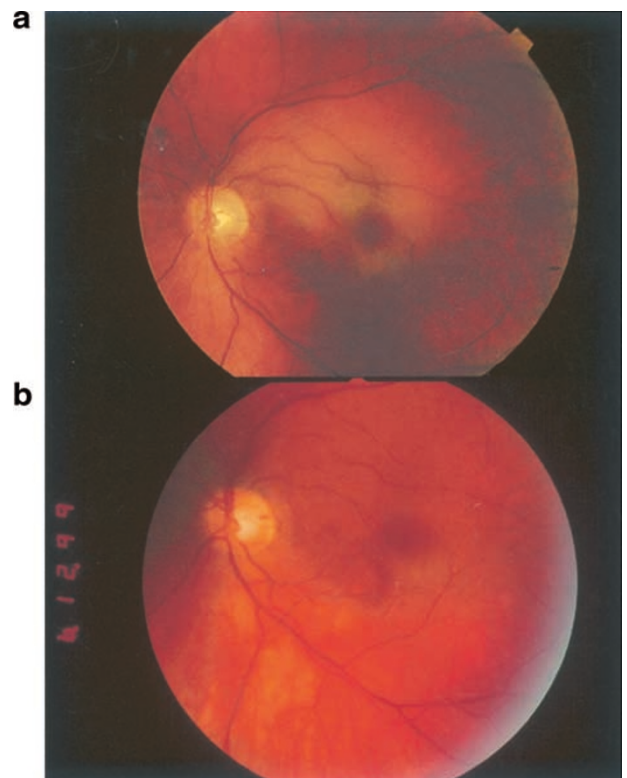


Figure 1 (a) Retinal oedema due to central retinal artery occlusion, with cilio-retinal vessel sparing the fovea at day 2. (b) Retina oedema regressed well at day 12.

field test was done (Figure 2). The superior temporal quadrant adjacent to fixation was relatively spared while the remaining three quadrants showed a dense scotoma. Anterior chamber paracentesis was done under a slit-lamp. Intravenous acetazolamide was administered.

A fluorescein angiogram was done the following day. This revealed delayed arterial filling in the left eye. A cilioretinal artery supplying the foveal area was present and filled normally. On the 12th day, his unaided visual acuity in the LE had improved to be 6/6 and the retinal oedema had resolved (Figure 1b).

Comments

Improvement of vision is noticed with a pinhole in cases of refractive errors, and peripheral media

opacities. Pinhole vision is not expected to improve in the presence of retinal pathology. In Central serous retinopathy (CSR), where the whole retina is lifted up, a relative hypermetropia occurs and improves with refractive (plus lenses) correction. It was unusual to notice visual improvement with a pinhole (but not with lenses) in our case. A literature search did not reveal any references to a similar occurrence.

Considering the limited sparing of his central vision immediately after arterial occlusion, it is likely that the pinhole enabled him to direct the image onto the functioning quadrant of his retina, thereby obviating the distortion caused by part of the image falling on functioning retina and part on non-functioning retina. Improvement in unaided vision corresponded to resolution of retinal oedema. It is therefore likely that retinal oedema also contributed in some manner to the observed phenomenon.

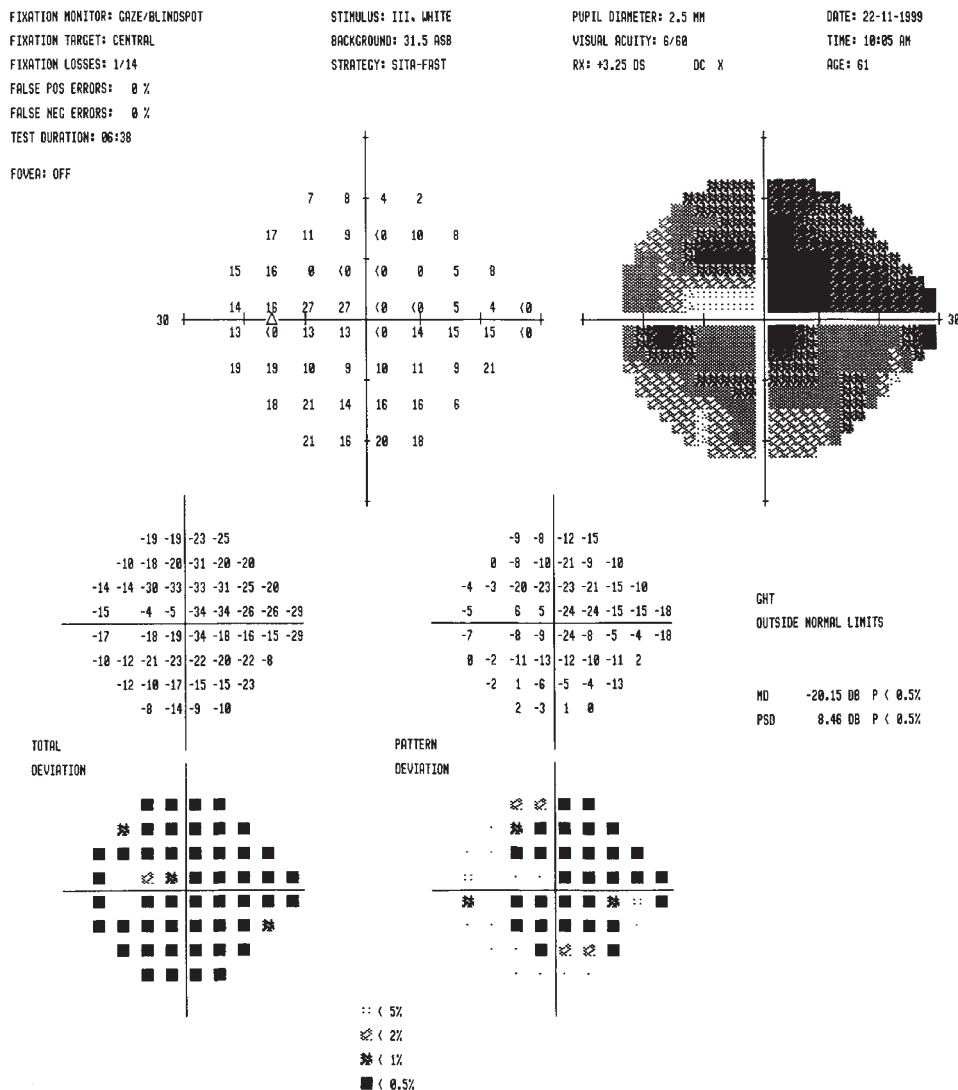


Figure 2 Sparing of upper temporal quadrant of the fovea.

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Sir,

Aspergillus iris granuloma in an immunocompetent individual

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Ocular *Aspergillosis* is usually associated with posterior segment involvement in immunocompromized hosts.^{1–6} One case of ocular *Aspergillosis* is reported in an immunocompetent individual.⁷ *Aspergillus* iris granuloma is very rare^{2,3} and to the best of our knowledge it has not been reported in an immunocompetent individual. We describe a healthy young individual who presented with an *Aspergillus* iris granuloma. Histopathological and microbiological evaluation of the lesion assisted us in planning the appropriate management.

Case report

A 34-year-old male presented with a white opacity over the iris in his left eye for one month. He was diagnosed elsewhere as having inflammatory

granuloma and had been put on systemic corticosteroids. General physical examination and systemic work-up were normal. The patient was afebrile. Systemic investigations for specific foci including blood, urine, cardiological and bronchoscopic evaluation was negative. His corrected visual acuity was 20/20 in his right eye and 20/200 in the left eye. The right eye examination was normal. The left eye showed deep anterior chamber (AC) with 2+ flare and cells and 1 mm of hypopyon, and an exudative granuloma was observed over the iris surface at 6 o'clock (Figure 1a). It was not possible to get the details of the posterior segment, however vitreous was found to be echo-free on ultrasonography. Diagnostic AC tap performed on day 1 was found to be negative. Over the next two days AC exudation had increased and vision was light perception. Excision biopsy of the granuloma was performed on day 3 through a corneal incision. Part of the iris measuring 2 mm was abscised along with the granuloma and was subjected to histopathological and microbiological evaluation.⁸ Five μ g of intracameral amphotericin B in 0.1 ml was given, due to high suspicion of fungus. Initial AC fluid and the biopsy grew *Aspergillus fumigatus* in 3 days on Sabouraud's dextrose agar and potato dextrose agar (at 27°C). Gomori methenamine silver (GMS) stain of the AC fluid revealed fungal hyphae (Figure 2a). Histopathology of the excision biopsy revealed thickened iris stroma, congested vessels and inflammatory cells (Figure 2b). Exudative membrane was observed on either surface of the iris. GMS stain revealed abundant septate branching fungal hyphae on the surface and within the iris stroma (Figure 2c). Five μ g of intracameral amphotericin B in 0.1 ml was repeated on day 6. The patient was started on oral fluconazole 400 mg initial dose followed by 200 mg daily, topical 5% natamycin eye drops every hour, 1% atropine sulphate eye drops three times a day and 0.03% flurbiprofen sodium eye drops two hourly. For the next one-month period the exudates showed regression and organization (Figure 1b). Pars plana vitrectomy was done to remove the fibrous tissue and vitreous. Posterior approach was adapted, in view of the iris and lens involvement with the fibrous tissue and anterior vitreous opacities on ultrasonography. Vitreous and fibrous tissue was negative for fungus. Systemic and topical antifungals were stopped at one-month post-vitrectomy period. At the sixth-month follow-up the visual acuity was 20/60, the eye was quiet (Figure 1c).

Comment

We suspected fungal etiology, due to the feathery nature of the granuloma (Figure 1a). An iris foreign