case was diagnosed on the basis of a leg lesion which the patient himself did not mention as he felt it was unrelated to his ocular problem, and the ophthalmologist may be the first to encounter these patients.

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Sir,

Posterior scleritis mimicking birdshot retinochoroidopathy

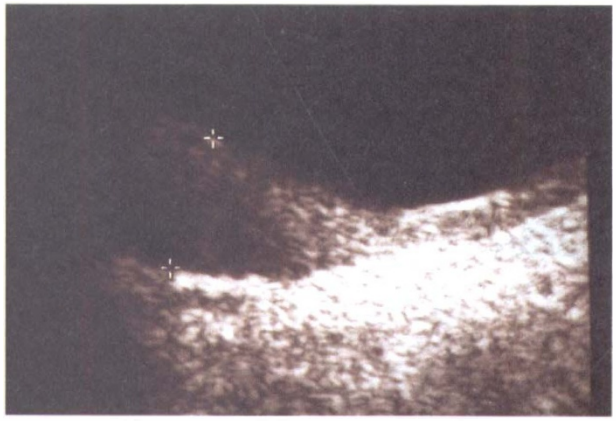
Scleritis is a severe and often painful inflammation of the connective tissue wall of the eye.[1] Scleral inflammation may be diffuse or nodular, necrotising or non-necrotising, and anterior and posterior. Posterior scleritis is less common than anterior scleritis, but since the diagnosis can be difficult to make, its precise prevalence is unknown.[2] Fundus findings that support the diagnosis of posterior scleritis include optic disc oedema, serous retinal detachment, and choroidal thickening, which can produce choroidal folds that are visible on fluorescein angiography. Less commonly, focal mass-like lesions have been described in patients with posterior scleritis, and may resemble a choroidal tumour[3] or, when anterior, a scleral buckle.[4]

We describe two patients who developed posterior scleritis associated with choroidal thickening. On resolution, both patients developed multiple, de-pigmented choroidal spots resembling birdshot chorioretinopathy.

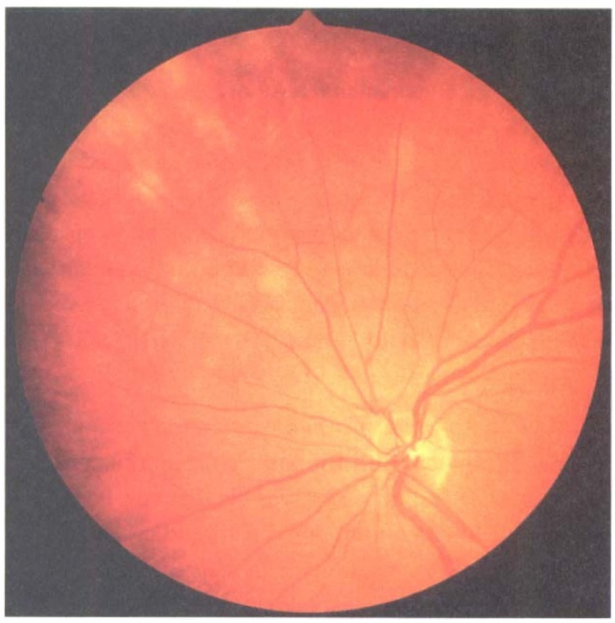
Case reports

Case 1. A 49-year-old Caucasian woman presented with pain and decreased vision affecting her left eye. Prior ocular and medical histories were unremarkable. Best-corrected visual acuity was 6/6 on the right and 6/24 on the left. Examination of the right eye was entirely unremarkable. Anterior segment examination on the left revealed diffuse scleral injection, and mild anterior chamber and anterior vitreous inflammation. Posterior segment examination on the left showed cystoid macular oedema. Serological testing revealed a normal complete blood cell count, a negative FTA-ABS, and negative anti-nuclear antibody, rheumatoid factor and anti-neutrophil cytoplasmic antibody titres. A chest radiograph was also negative. The patient was treated with topical and periocular corticosteroids and showed marked improvement.

Over the following 5 years, the patient had recurrent episodes of anterior and posterior scleritis that became increasingly difficult to control with topical, periocular and oral corticosteroids. A particularly severe episode of posterior scleritis was associated with marked thickening of the superonasal choroid. Ultrasonography measured the posterior fundus wall thickening at 5.0 mm (Fig. 1a). Histological examination of a trans-scleral choroidal biopsy showed numerous macrophages and

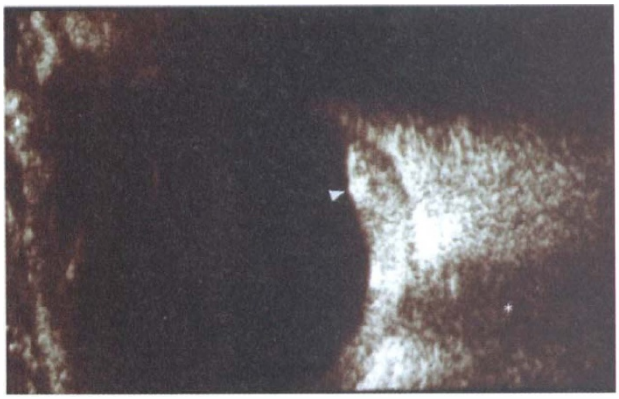


(a)



(b)

Fig. 1. *Case 1. (a) B-scan ultrasonography reveals thickening of the superonasal posterior fundus wall measuring 5.0 mm (crossmarks). (b) Colour fundus photograph taken months after the resolution of the patient's posterior scleritis shows multiple, depigmented choroidal lesions mimicking birdshot retinochoroiditis.*



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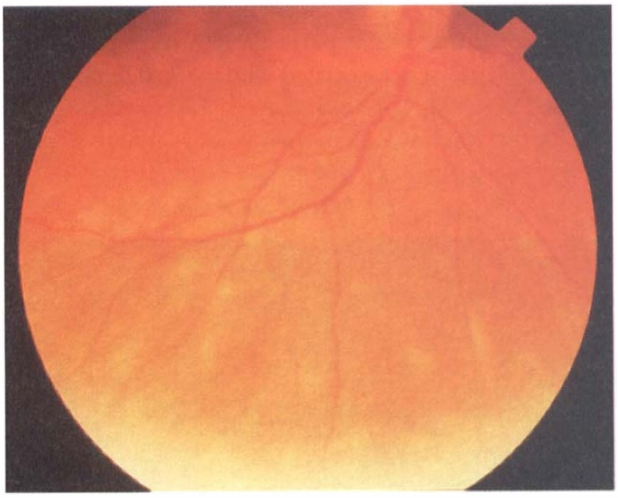

(b)

Fig.2. *Case 2. (a) B-scan ultrasonography reveals thickening of the inferior posterior fundus wall measuring 3.7 mm (arrowhead). The optic nerve is indicated (asterisk). (b) Colour fundus photograph taken months after the resolution of the patient's posterior scleritis shows multiple, de-pigmented choroidal lesions mimicking birdshot retino-choroiditis.*

lymphocytes, with occasional eosinophils, but no evidence of atypical or malignant cells. The patient was treated with 3000 cGy of ocular radiation, delivered in 15 doses over 21 days. The scleritis resolved and visual acuity gradually improved to 6/12. Examination of the superonasal fundus following resolution of the scleritis revealed multiple, de-pigmented choroidal lesions resembling birdshot chorioretinopathy (Fig. 1b). HLA-A29 testing was negative.

Case 2. A 76-year-old Caucasian woman with long-standing rheumatoid arthritis and multiple recurrences of both anterior and posterior scleritis that had been controlled on low-dose oral prednisone and cyclosporine presented for routine examination. She denied pain or other visual symptoms. Best-corrected visual acuity was 6/9 bilaterally. Anterior segment examination showed diffuse thinning of the circumlimbal sclera in each eye. Examination of the left fundus was unremarkable. Examination of the right posterior segment revealed a large area of inferior choroidal thickening and an overlying, shallow serous retinal detachment. Ultrasonography measured the posterior fundus wall thickening at 3.7 mm (Fig. 2a).

The patient was treated with a short course of oral prednisone, and the scleritis, choroidal thickening, serous retinal detachment and visual acuity all gradually improved. Following complete resolution of the episode of scleritis, multiple de-pigmented choroidal spots remained inferiorly resembling birdshot chorioretinopathy (Fig. 2b). HLA-A29 testing was negative.

Comment

We have described two patients with posterior scleritis and choroidal thickening that produced multiple, de-pigmented choroidal spots resembling birdshot chorioretinopathy. In each case, the de-pigmented spots were limited to the areas of fundus wall thickening. Neither patient was HLA-A29 positive.

The diagnosis of posterior scleritis is often challenging.[2] Many patients, although not all, will have severe, aching pain suggestive of scleral inflammation. Some, as in our case 2, will have a known systemic disorder which predisposes them to bouts of scleral inflammation. Both our patients were known to have recurrent anterior and posterior scleritis, and in each case ultrasonography was used to document the degree of the posterior fundus wall thickening.

Birdshot chorioretinopathy can also be difficult to diagnose.[5] Most patients are Caucasian and over 40 years of age, and all eventually developed multiple yellow or cream-coloured choroidal spots involving much of the mid- and far-periphery of each eye. It is difficult to consider that diagnosis in the absence of a positive HLA-A29 test.

Ocular sarcoidosis is the most common mimic of birdshot chorioretinopathy,[6,7] although tuberculosis, syphilis, lymphoma, and other conditions affecting the choriocapillary may cause birdshot-like choroidal changes as well.[5] Even though the first patient reported had radiotherapy, the choroidal changes were only associated with the area of scleral thickening, which suggests an association with the scleral inflammation and not with the radiotherapy. The findings in our two patients suggest that posterior scleritis should also be considered in patients with multiple de-pigmented choroidal spots, particularly when associated with a history of pain and/or posterior fundus wall thickening.

This work was supported in part by a Career Development Award from Research to Prevent Blindness, Inc. (E.T.C.).

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Sir,

Siegrist's streaks: a rare manifestation of hypertensive choroidopathy

The systemic manifestations of uncontrolled hypertension are diverse. Ocular involvement can be in the form of either a hypertensive retinopathy, hypertensive choroidopathy or a combination of both. Lesions due to hypertensive choroidopathy can be classified into pale yellow or reddish plaques in the peripheral fundus surrounded by pigmentary deposits, large patches of chorioretinal atrophy, Elschnig's spots and Siegrist's streaks.[1] Elschnig's spots, although clinically uncommon, have been described most commonly in the literature;[2,3] however, mention of Siegrist's streaks is rare.[4,5] A case of Siegrist's streaks in a patient with chronic hypertension is described.

Case report

A 66-year-old man with hypertension, ischaemic heart disease, atrial fibrillation and asthma was referred for an ophthalmic opinion by his optician who noted scattered haemorrhages in his retina. The visual acuity was 6/9 right and 6/6 left with a normal anterior segment. The pupils were equal, and there was no relative afferent pupillary defect. The optic disc was healthy with a cup–disc ratio of 0.5:1 in each eye. There was generalised arteriolar narrowing with arteriovenous nipping and superficial and deep retinal haemorrhages. There were no cotton wool spots. There were sclerotic changes in the choroidal blood vessels with lines of retinal pigment epithelium along the blood vessels identified as 'Siegrist's streaks' (Fig. 1). The patient's blood pressure at this visit was 210/110 mmHg.

The patient was referred for further management of his hypertension and followed up in the ophthalmic clinic for over 1 year. During this period, following improved control of his blood pressure, there was resolution of the haemorrhages but the appearance of the Siegrist's streaks remained unchanged.

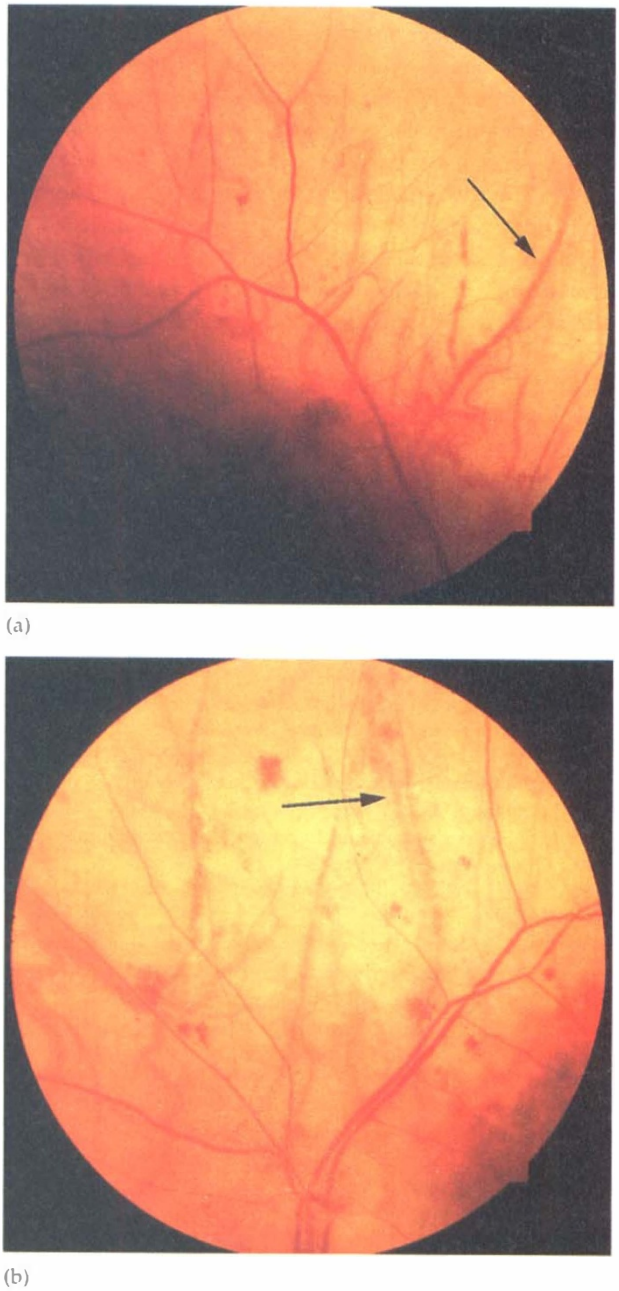

Fig. 1. *Fundus photographs of the right eye (a) and left eye (b) showing Siegrist's streaks (arrow).*

Comment

Hypertensive choroidopathy is usually the result of an acute hypertensive crisis of accelerated hypertension in young adults and Siegrist's streaks are one of its rarest features. Siegrist's streaks are linear configurations of hyperpigmentation that develop over choroidal arteries in chronic hypertension.[4–6] Duke Elder[1] suggested that these changes are due to a patchy distribution of the sclerotic process in the choriocapillaris, consisting of hyperpigmentation over sclerotic choroidal vessels.