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XZ Wang, SN Li and NL Wang

Tongren Eye Center, Tongren Hospital, Capital University of Medical Science, Beijing, People's Republic of China

Correspondence: NL Wang
Tongren Eye Center,
Tongren Hospital, Capital University
of Medical Science,
1ST Dongjiaominxiang,
Beijing 100730,
People's Republic of China
Tel: +86 010 58269919;
Fax: +86 010 58269919.
E-mail: wningli@trhos.com

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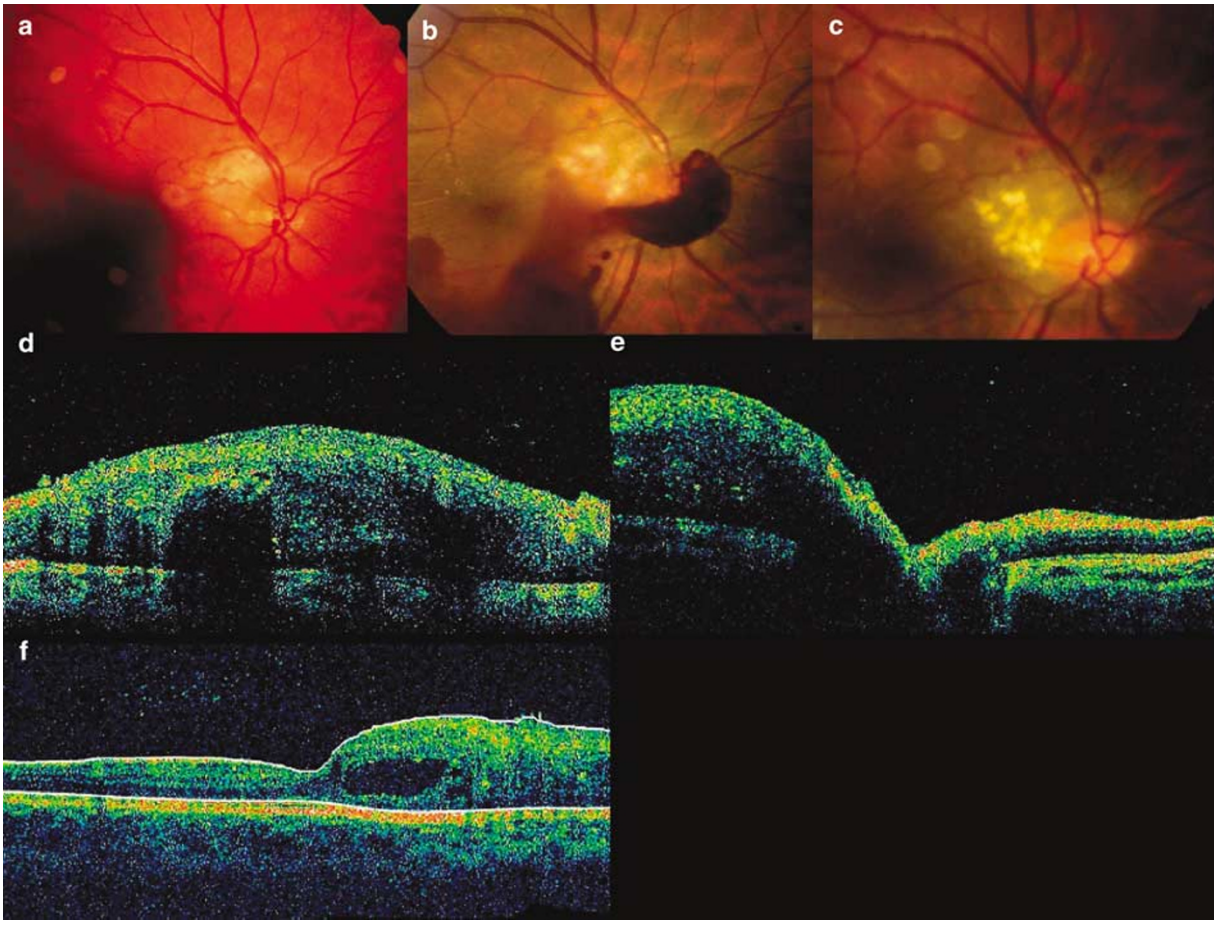
Sir,

Recurrent vitreous haemorrhage from sporadic retinal astrocytic hamartoma

We read with interest the case reported by Giles *et al*.[1] of sporadic retinal astrocytic hamartoma showing signs of retinal vasculopathy with exudation. We also report a case of an unusual manifestation of sporadic retinal astrocytic hamartoma, presenting with recurrent vitreous haemorrhage.



Case report

A 25-year-old white male presented in 2005 as an emergency with floaters and decreased visual acuity in the right eye. His past ocular history was positive for unexplained juxtapapillary retinal oedema and vitreous haemorrhage in 1996 with spontaneous resolution (Figure 1a). Systemic and family history was negative. His VA in right eye was 20/40, and fundus examination showed a circumscribed yellow white juxtapapillary retinal lesion along the superotemporal arcade with vitreous haemorrhage arising from the lesion (Figure 1b). Based on his past ocular history, we decided to observe the evolution of the patient's condition. After 3 months his vision was 20/20 in right eye, the vitreous haemorrhage had resolved and the retinal tumour was apparent, with traction to the superotemporal macular region (Figure 1c). Fluorescein angiography (FA) showed relative hypofluorescence in the arterial phase, tortuous retinal vessels on and around the lesion, with late diffuse hyperfluorescence (Figure 2a and b). On indocyanine angiography (ICGA) choroidal fluorescence was totally blocked by the retinal lesion (Figure 2c). Ocular coherence tomography (OCT) through the lesion showed irregular inner retinal thickening and the superotemporal quadrant of the optic disc also demonstrated

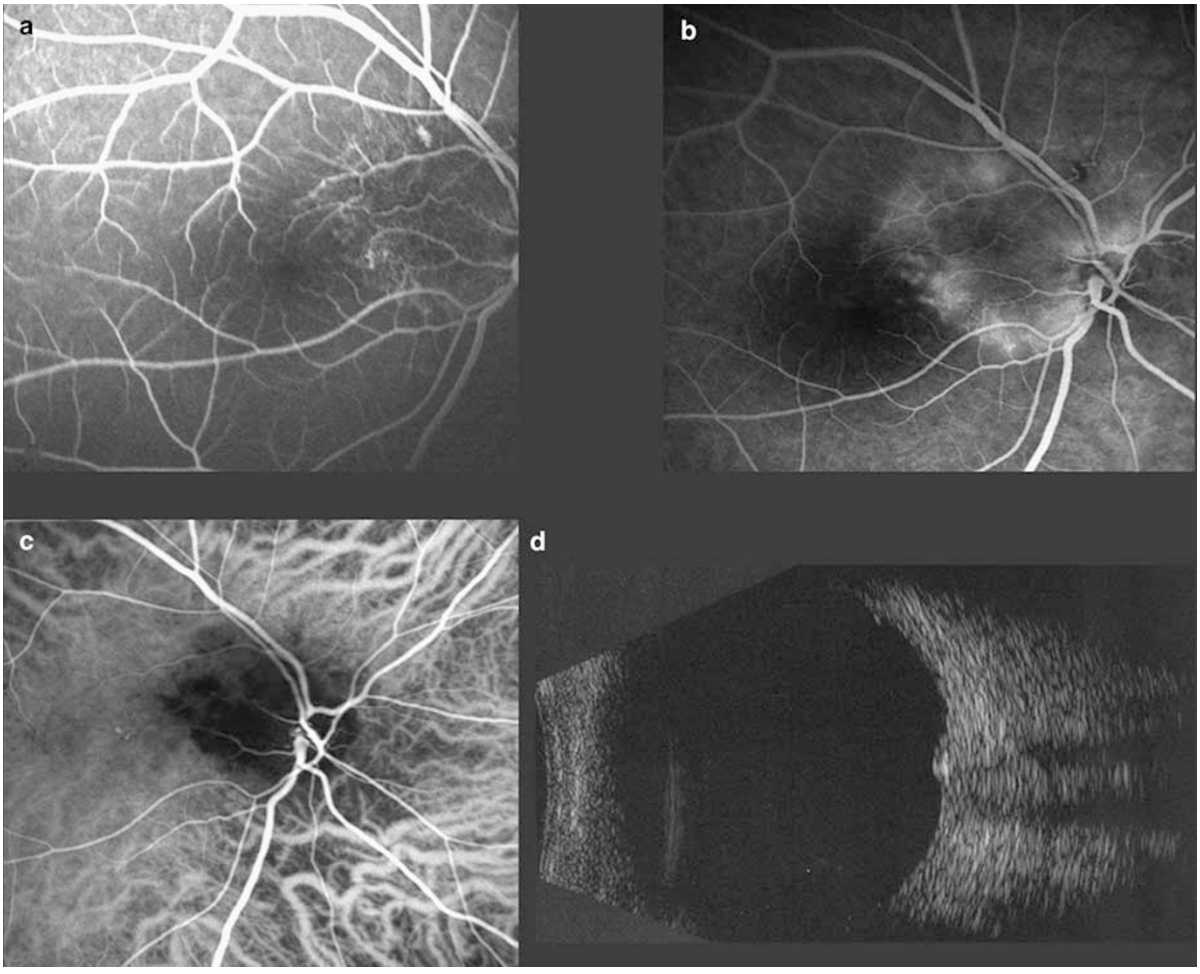


Figure 2 (a) Fluorescein angiogram at 25 s and (b) 1 min 40 s. (c) ICG at 1 min 30 s. (d) Ultrasound B-scan shows increased reflectivity in the lesion with hyporeflectivity posterior to the tumour.

Figure 1 (a) Fundus photograph of the right eye in 1996 obtained from previous records; (b) in 2005 on presentation with vitreous haemorrhage and (c) three months later (note spontaneous resolution of vitreous haemorrhage). Optical Coherence Tomography of: (d) retinal lesion, (e) optic nerve head, and (f) macula.

neurosensory retinal thickening, with deeper dark shadows consistent with calcification (Figure 1d and e). Retinal oedema in the macula was confirmed on OCT (Figure 1f). B-scan ultrasound (Figure 2d) revealed a solid dome-shaped mass with high focal reflectivity due to the calcification. The left eye was within normal limits and systemic examination was negative for tuberous sclerosis. The tumour remained stable after 1 year and we obtained a fundus photograph from 9 years previously that confirmed no change (Figure 1a).

Comment

Our final diagnosis was sporadic retinal astrocytic hamartoma with recurrent vitreous haemorrhage. Vitreous haemorrhage in retinal astrocytic hamartoma is unusual and has been reported previously only in the context of tuberous sclerosis.[2–6] Along with the case of Giles *et al*,[1] our case suggests a vascular component exists in sporadic retinal astrocytic hamartoma.

Retinal astrocytic hamartomas of tuberous sclerosis have been classified into three types by angiographic features: all three types block choroidal fluorescence to some extent and show late leakage on FA, but on ICG type 1 has subtle blockage of choroidal fluorescence, type 2 has total blockage (from calcification) and type 3 has total blockage only in the centre.[7] Though our case is sporadic, it has features of type 1 on FA and type 2 on ICG, suggesting incomplete calcification. OCT features are also consistent with retinal astrocytic hamartoma.[8]

We believe that sporadic retinal astrocytic hamartoma should now be included in the differential diagnosis of recurrent vitreous haemorrhage – sporadic cases can exhibit vasculopathic features.

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PL Grenga[1], MS Sagoo[2] and R Malagola[1]

[1]Department of Ophthalmology,
Policlinico Umberto I, I Division,
University of Rome 'La Sapienza',
Rome, Italy

[2]Moorfields Eye Hospital, City Road,
London EC1 V 2PD, UK

Correspondence: PL Grenga,
Department of Ophthalmology,
University 'La Sapienza', Viale del Policlinico 155,
00161 Rome, Italy
Tel: +3 93475428544;
Fax: +3 9065408235.
E-mail: plgrenga@hotmail.it

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Sir,

Protein S deficiency manifesting simultaneously as central retinal artery occlusion, oculomotor nerve palsy, and systemic arterial occlusive diseases

A 28-year-old Asian gentleman presented with sudden onset of left eye ptosis and visual loss owing to central

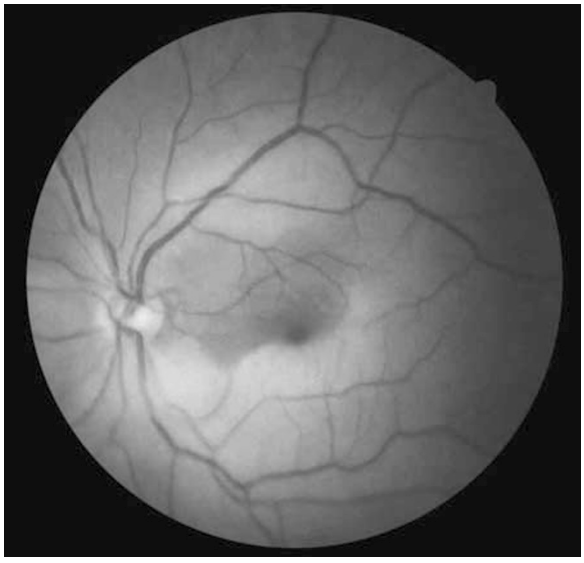

Figure 1 Left fundus photo. Central retinal artery occlusion with presence of cilioretinal circulation.