IMAGES IN MEDICINE

Retinal astrocytic hamartoma

Routine ophthalmoscopic examination of an asymptomatic, otherwise healthy 63 year old woman revealed a one and a half optic disc diameter sized lesion in the peripheral retina of the right eye (fig 1). The lesion was a greyish white raised nodular mass with patchy calcification overlying the blood vessels on the surface of the retina. The lesion looked more prominent when red-free light was used for examination (fig 2). The rest of the ocular and detailed systemic examination was unremarkable. The appearance is typical of endophytic astrocytic hamartoma of the retina.

Retinal astrocytomas can arise from any location in the retina, from the optic disc and macula to the extreme periphery. Astrocytic hamartomas of the retina or optic disc are typical retinal lesions in patients with tuberous sclerosis in whom they may be multifocal and bilateral.¹ Early diagnosis based on signs is important for both genetic counselling and management in this condition; this is aided by identification of the typical retinal lesions which can be detected within the first two years of life. Retinal astrocytic hamartomas are also reported in association with neurofibromatosis.² Also solitary astrocytic hamartomas may be seen in otherwise normal patients,³ as in our

case. Retinal astrocytomas associated with tuberous sclerosis or neurofibromatosis are more likely to be multiple and more peripheral in contrast to unilateral, unifocal lesions which occur in patients who have no underlying systemic disorder.⁴ These retinal tumours are benign and non-neoplastic, generally showing evidence of minimal or slow growth. It is important to recognise an astrocytoma clinically, as eyes with this lesion may be unnecessarily enucleated, if a malignant neoplasm such as an amelanotic choroidal melanoma is suspected.

S PRASAD
G G KAMATH
Department of Ophthalmology,
Arrowe Park Hospital, Wirral, UK

Correspondence to: Dr Somdutt Prasad, Arrowe Park Hospital, Upton, Wirral CH49 5PE, UK
somprasad@lineone.net

- 1 Williams R, Taylor D. Tuberous sclerosis. *Surv Ophthalmol* 1985;30:143-54.
- 2 Ulbright TM, Fulling KH, Helveston EM. Astrocytic tumors of the retina. Differentiation of sporadic tumors from phakomatosis-associated tumors. *Arch Pathol Lab Med* 1984;108:160-3.
- 3 Reeser FH, Aaberg TM, Van Horn DL. Astrocytic hamartoma of the retina not associated with tuberous sclerosis. *Am J Ophthalmol* 1978;86:688-98.
- 4 Nyboer JH, Robertson DM, Gomez MR. Retinal lesions in tuberous sclerosis. *Arch Ophthalmol* 1976;94:1277-80.

Figure 1 Colour fundus photograph of the right eye shows a greyish white raised nodular mass with patchy calcification overlying the blood vessels on the surface of the retina.

Figure 2 Fundus photograph of the same lesion using red-free light. The astrocytoma is more prominent.