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Sir,

Retinal astrocytic hamartoma with exudation

Case report

An asymptomatic 24-year-old lady was referred in 1997 following a routine optician examination with an amelanotic posterior pole lesion in her right eye. Her past medical history and family history were not contributory. Her visual acuity was 6/6 in both eyes. She was diagnosed as having retinocytoma. She was under periodic observation until October 2001 when she was referred to the Ocular Oncology Clinic for a second opinion.

Examination of the right eye showed a circumscribed yellow white retinal lesion along the superotemporal arcade (Figure 1). The lesion had fine intrinsic vessels and the feeder vessels were of normal caliber in contrast to retinoblastoma. Retinal exudation surrounding the lesion was also present. Fluorescein angiography showed intrinsic vasculature in the arteriovenous phase (Figure 2a) with late diffuse hyperfluoresence (Figure 2b). On indocyanine angiography (Figure 2c), the intrinsic vessels appeared to be of retinal origin. Blocking of choroidal fluorescence due to a deep retinal component of the lesion was also observed (Figure 2c, arrowheads). On B-scan ultrasonography, high intrinsic reflectivity indicated calcification (Figure 2d).

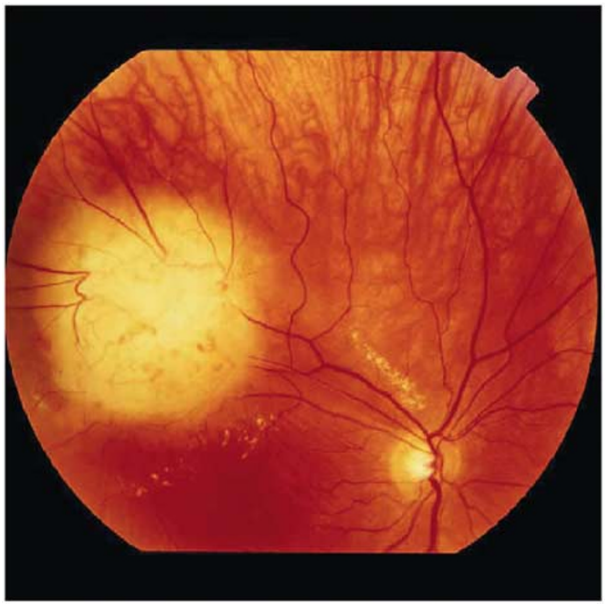

Figure 1 Fundus photograph of the right eye showing a circumscribed yellow white retinal lesion. Note retinal exudation.

Comment

The differential diagnosis of a calcified retinal mass must include retinoblastoma, retinocytoma, and astrocytic hamartoma. Remote possibilities such as combined hamartoma of the retina and retinal pigment epithelium, retinal pigment epithelial adenoma, and retinal capillary hemangioma were also considered.

A final diagnosis of a sporadic astrocytic hamartoma with exudation was made as she had none of the clinical findings associated with tuberous sclerosis complex.

Approximately 50% of patients with tuberous sclerosis complex have retinal astrocytic hamartoma with bilateral involvement in 25%.[1] They are located superficially in the retina predominantly near the optic disc. The retinal astrocytic hamartoma are generally stable with slow growth over several years or new calcification in some cases.[2,3] It is unusual for new lesions to develop in a previously normal-appearing retina[3] or for astrocytic hamartoma to demonstrate spontaneous regression.[4] Rare cases of aggressive astrocytic hamartoma leading to retinal exudation and even exudative retinal detachment have been reported.[5]

In summary, this patient developed a sporadic retinal astrocytic hamartoma with retinal exudation, in the

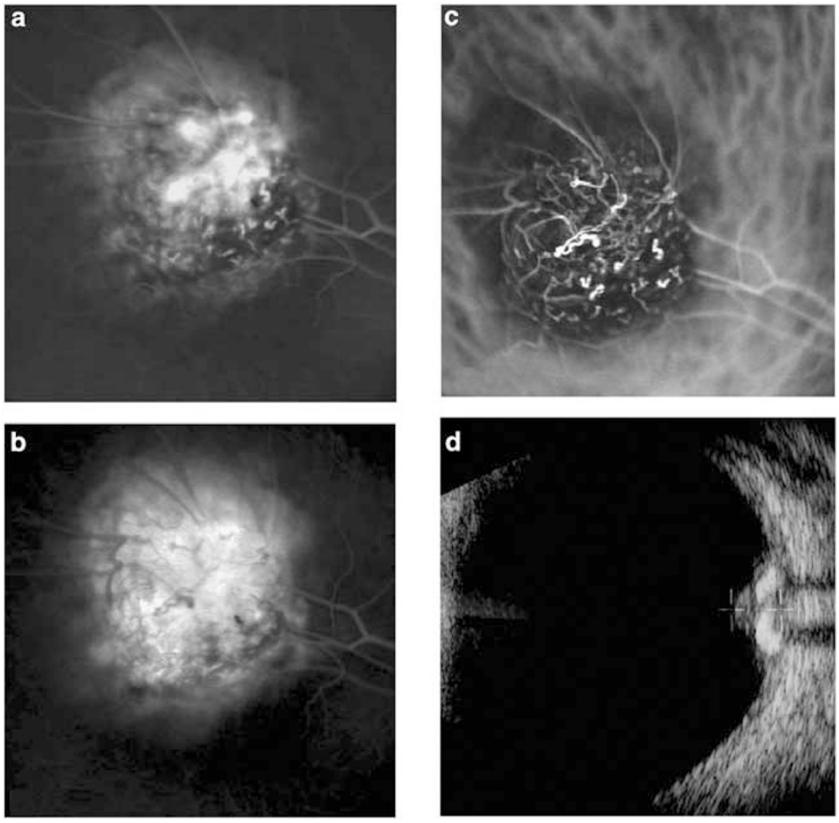

Figure 2 (a) Fluorescein angiogram (arteriovenous phase) reveals fine intrinsic vessels. (b) Late phase of the fluorescein angiogram showing diffuse hyperfluoresence. (c) Indocyanine angiogram. Note prominent intrinsic vessels and blocked choroidal fluorescence due to a deeper retinal involvement. (d) B-scan ultrasonograph was indicative of intrinsic calcification.

absence of the clinical findings associated with tuberous sclerosis complex.

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