



Astrocytic Hamartoma in routine eye examination: a case series

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INTRODUCTION

Retinal astrocytic hamartoma (AH) is a benign tumor of the retinal nerve fiber layer or of the optic disk composed of glial cells, predominantly astrocytes (1,2,5,6). They represent 3% of leukocoria cases in children (4).

METHODS

We report a case series of 03 patients accidentally diagnosed with astrocytic hamartoma during routine eye examination.

RESULTS

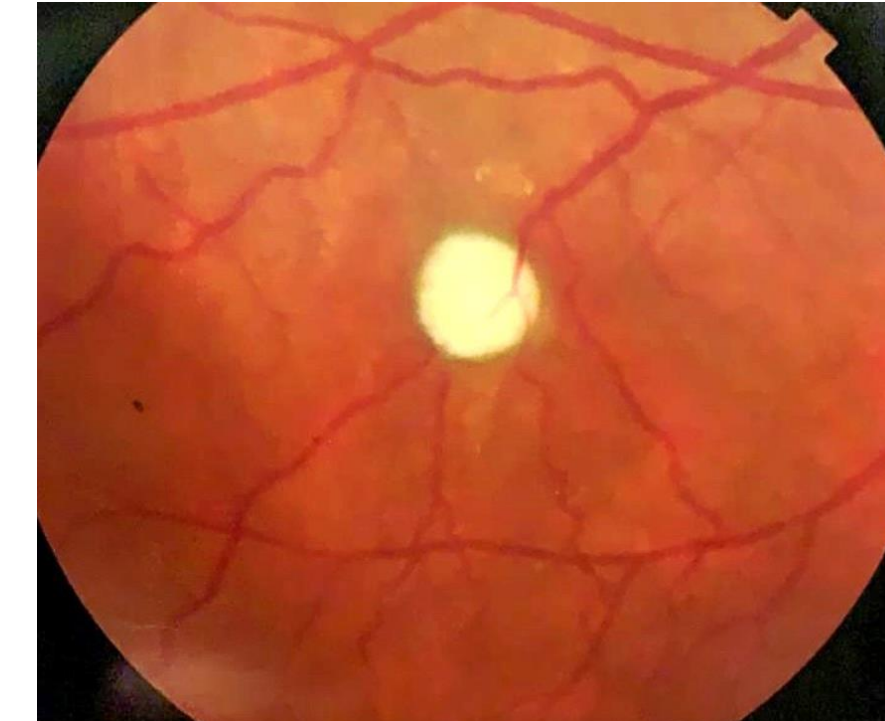
Our first case was a male patient, 10 years old, referred to us for a routine eye examination. Personal antecedent: tuberous sclerosis. Best corrected visual acuity (BCVA): 20/20. Right eye fundus: whitish multilobular retinal lesion above the optic disk. Left eye fundus: normal. Ultrasound B-scan showed retinal mass lesion measuring 3,6x4,0x2,5 mm. Acoustic shadowing was observed in multilobular calcified areas. Our second case was a female patient, 61 years old, no visual complains. BCVA 20/30P. Right eye fundus: subretinal white, flat, translucent, well defined and noncalcified lesion. Left eye fundus: normal findings. Our third patient was a female patient, age 71. BCVA: 20/30. RYF: normal. LYF: retinal lesion consisting of glistening yellowish spherules of calcification surrounded by a sessile and slightly elevated lesion along the inferotemporal arcade. USG A-scan: hyper-reflective lesion, measuring 1,5 disc diameters.

DISCUSSION

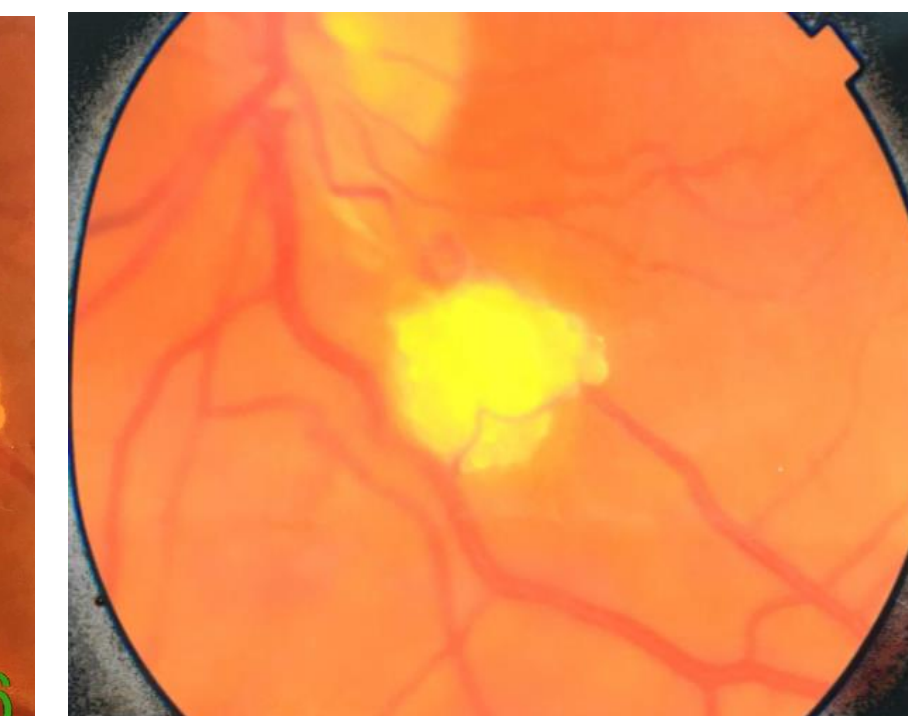
Morphologically, Astrocytic Hamartomas can be classified as one of two types: 1- Large, whitish (calcified) nodular masses – commonly referred to mulberry lesions (2,4); 2-most common-flat, translucent smooth tumors (1,4). More than half of these tumors go undetected, due to its asymptomatic features (1). It can, however, cause "mass effect" and may cause retinal detachment and vitreous seeding (6). Our third case previously described showed a type 1 Astrocytic Hamartoma, containing white and calcified nodular masses/spherules. A lesion containing a mulberry-like calcification is pathognomonic of tuberous sclerosis, such as observed in our 10 year-old patient. They are the most common ocular finding of tuberous sclerosis complex(2).



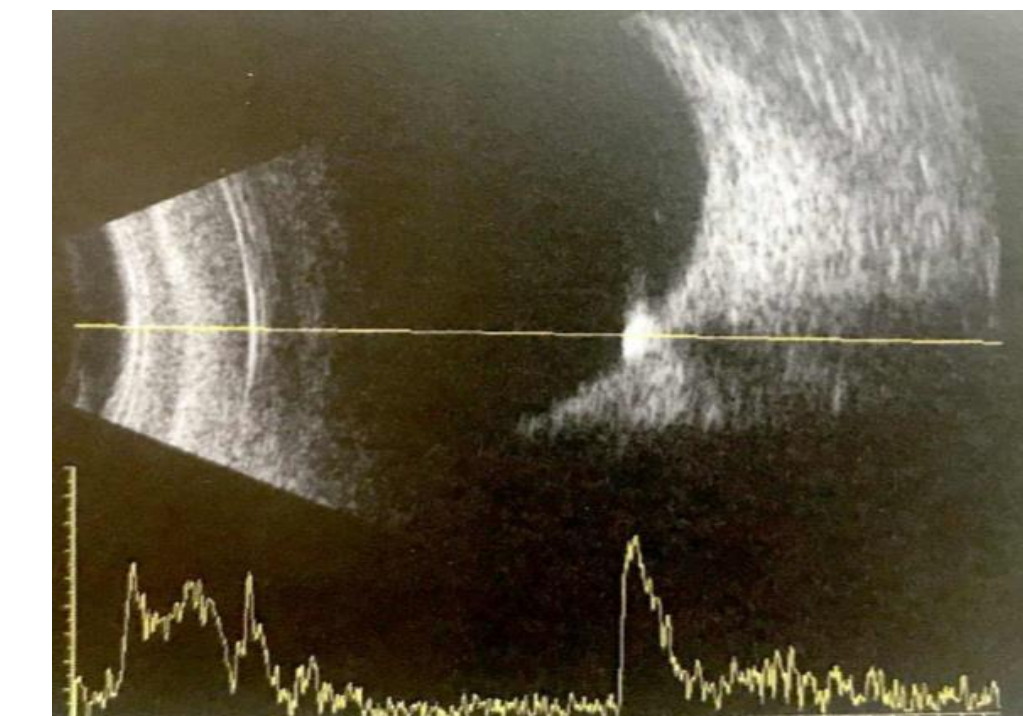
Picture 1- 1st case Right eye Retinography



Pictures 2 and 3 – 2nd case Right eye Retinography.



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Pictures 3-4- 3rd case Left eye Retinography



Picture 5 – 3rd case Left eye Ultrasound

However, may cause doubt when appearing as a small, translucent noncalcified thickening of the nerve fiber layer. In these cases Retinoblastoma and myelinated nerve fibers must be considered in the differential diagnosis, such as capillary and cavernous hemangioma(6).

KEY WORDS

Glial tumors; Calcification; Hamartoma; Tuberous sclerosis; Retina

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