

Wide-Field Multimodal Imaging for Choroidal Macrovessel: A Case Series

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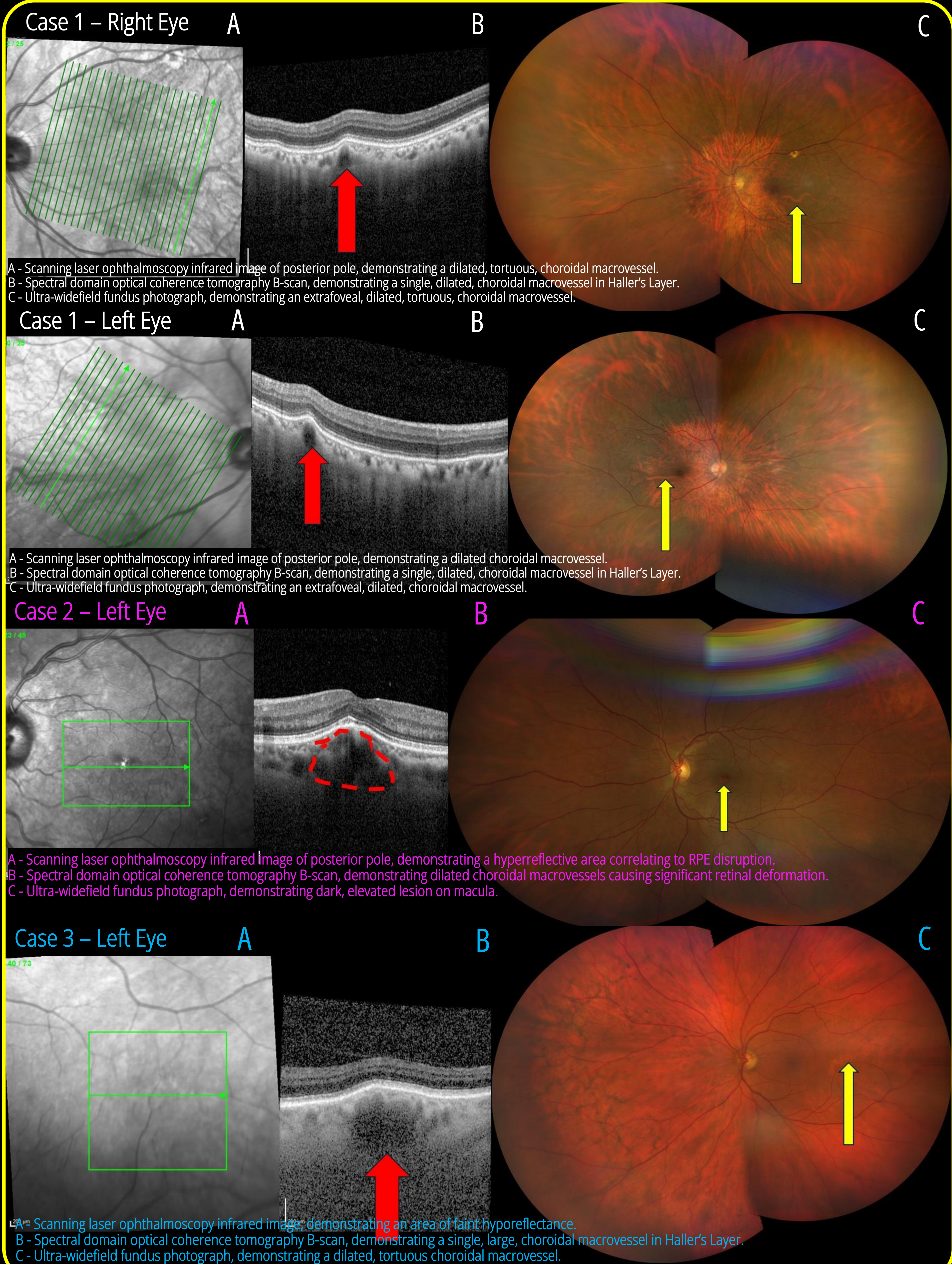


Choroidal Macrovessels (CM) are rare, aberrant vessels in Haller's layer that can mimic a number of other entities. They are dilated choroidal vessels, and feature within the Pachychoroid Spectrum.[1] This case series demonstrates the utility of wide-field imaging and Spectral Domain Optical Coherence Tomography (SD-OCT) in non-invasively confirming CM and preventing delays.

	Case 1 (66F)	Case 2 (64F)	Case 3 (78M)
Presentation	Vision loss; trauma Hx	Progressive visual decline	Optician referral (asymptomatic)
Comorbidities	T2DM, HTN, RA, RE globe-trauma, Glaucoma	T2DM, Hypothyroidism	Asthma, Pacemaker, CVD
CM Location	Bilateral, extrafoveal	Left eye, foveal	Left eye, extrafoveal (temporal)

Differential Diagnoses

- Choroidal Hemangioma:**
Dome-shaped elevation, compression of the choriocapillaris; CM appears as a tubular structure within the choroid.[1]
- Choroidal Melanoma:**
Solid mass reflectivity, subretinal fluid; CM is purely vascular and lacks internal reflectivity.[1,3]
- Ophthalmomyiasis Interna (Parasitic Tracks):**
Subretinal larval tracks, pale, serpentine lines in the posterior pole, mimics tortuous shape of a macrovessel. Usually at the level of the RPE, causing RPE atrophy and tram-line pigmentation along the path; CM is deeper (Haller's layer).[2]
- Vortex Vein Varices:**
Dilated venous channels, dark/orange elevated lesions. Typically occur in the equatorial or peripheral retina, change size or disappear with pressure on the globe or changes in gaze; CM is pressure stable, and typically located in the posterior pole (macular area).[3]



Conclusions

Bilateral CM may be more common than previously reported.

Multimodal imaging confirms the benign nature of CM non-invasively.

Recognition of CM excludes worrying differentials and helps up bypass unnecessary referrals to already busy clinics.

References:

1 - Gallo B, et al. CM: multimodal imaging findings and review of literature. Br J Ophthalmol. 2022;106(4):568-575.
2 - Gunay M, et al. A rare case of ophthalmomyiasis interna. Am J Ophthalmol Case Rep. 2017;5:21-23.
3 - Paecke S, et al. Vortex vein varix: a rare differential diagnosis of choroidal melanoma. Ophthalmologe. 2005;102(6):621-625.