

## CLINICAL IMAGE

# Optical coherence tomography of racemose angioma

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**Abstract**

Wyburn-Mason syndrome is associated with racemose angioma of the retina and arteriovenous malformation of the brain. Optical coherence tomography and MRI angiography may be used to document the vascular lesion of the retina and brain, respectively.

**KEYWORDS**

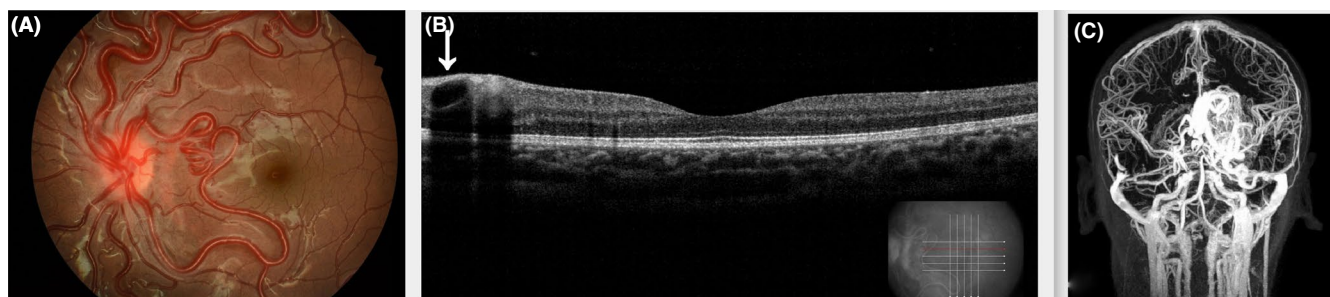
arteriovenous malformation, OCT, phakomatosis, retinal racemose hemangioma, Wyburn-Mason syndrome

## 1 | INTRODUCTION

This 6-year-old asymptomatic girl had an unaided visual acuity of 20/20 in both eyes. The left eye (Figure 1A) revealed dilated and tortuous retinal vessels with arteriovenous malformation (racemose angioma) which was captured with VX 10 $\alpha$  fundus camera (Kowa Company, Ltd). Optical coherence tomography (OCT) using RTVue OCT (Optovue, Inc) revealed round intraretinal structures with shadow effect corresponding to the vascular malformation (arrow, Figure 1B).

MRI angiography of brain and orbit showed large serpiginous vascular lesion involving left basal ganglia and thalamus suggestive of arteriovenous malformation confirming the diagnosis of Wyburn-Mason syndrome (Figure 1C).<sup>1</sup>

Wyburn-Mason syndrome is a phakomatosis associated with arteriovenous malformation of various structures including the retina, optic nerve, maxilla, thalamus, hypothalamus, and cerebral cortex. With OCT, it is now possible to evaluate the optical biopsy of the retina *in vivo*.<sup>2</sup> OCT in our case demonstrated the lumen of the vascular malformation.



**FIGURE 1** A, The color fundus photo of the left eye shows the racemose angioma of the retina. B, The vascular lumen (arrow) was documented with the optical coherence tomography scan. C, The MRI angiogram of the brain shows the arteriovenous malformation on the left side

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## CONFLICT OF INTEREST

None declared.

## AUTHOR CONTRIBUTIONS

RR and KT: had full access to all data of the manuscript and take responsibility for the integrity of the data. CP, KT, and RR: were responsible for acquisition of data. All the authors: were involved in manuscript concept and design, analysis and interpretation of data, drafting of the manuscript, and critical revision of the manuscript for important intellectual content.

## INFORMED CONSENT

Informed consent was taken from the guardians of the patient for publication.

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