Teaching NeuroImages: Morning glory disc anomaly

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Figure Funduscopy and brain MRI

(A) Right eye funduscopy. Funduscopy shows a funnel-shaped excavation of the optic disc (asterisk), a pigmented ring in the peripapillary area (arrowhead), and a radial aspect of the retinal vessels (arrow). (B) Brain MRI. T2-weighted images find the excavation (arrow) and glial tuft at the optic nerve insertion (arrowhead).

A 7-month-old girl presented with strabismus. Funduscopy (figure, A) revealed a typical morning glory disc anomaly (MGDA) of the right eye, including an enlarged funnel-shaped excavation of the optic disc, a peripapillary pigmented ring, and a radial aspect of the retinal vessels. Brain MRI (figure, B) showed excavation and abnormal tissue at the optic nerve insertion consistent with glial tuft. The symptoms caused by a MGDA are various and not always present: variable visual acuity (often poor) for the affected eye, visual field defects, and enlarged blind spot are the most common symptoms. Serous retinal detachments can occur. The pathology is usually unilateral. MRI helps in making the diagnosis and detecting associated intracranial abnormalities,¹ especially midline anomalies like transphenoidal basal

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encephalocele and moyamoya syndrome. There is no treatment for MGDA; however, optimizing visual acuity is important to prevent amblyopia.²

Author contributions

G. Poillon: study concept and design, acquisition of data, analysis and interpretation. P. Gillard: analysis and interpretation, critical revision of the manuscript for important intellectual content. A. Leclerc: study concept and design, critical revision of the manuscript for important intellectual content, study supervision.

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References

1. Ellika S, Robson CD, Heidary G, Paldino MJ. Morning glory disc anomaly: characteristic MR imaging findings. *AJNR Am J Neuroradiol* 2013;34:2010–2014.
2. Lit ES, D'Amico DJ. Retinal manifestations of morning glory disc syndrome. *Int Ophthalmol Clin* 2001;41:131–138.

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