Morning glory syndrome

Morning glory anomaly, Morning glory disc

DESCRIPTION

The appearance of this very rare congenital malformation of the optic nerve head has been likened to the morning glory flower. The optic disc is displaced posteriorly in a funnel-shaped excavation surrounded by an elevated pigment ring. The condition is usually unilateral. Vision is generally poor, and retinal detachment occurs in over one third of cases. Some patients have associated conditions including midline facial anomalies (depressed nasal bridge and hypertelorism); basal skull defects, with herniation of pituitary and hypothalamic tissue; panhypopituitarism; and absence of the corpus callosum.

The cause of morning glory syndrome is unknown. It may be a form of optic disc coloboma. The retinal detachment is thought to result from a retinal tear within the excavation, providing an abnormal communication between the subretinal space and either the vitreous cavity or the subarachnoid space surrounding the optic nerve.

SYMPTOMS

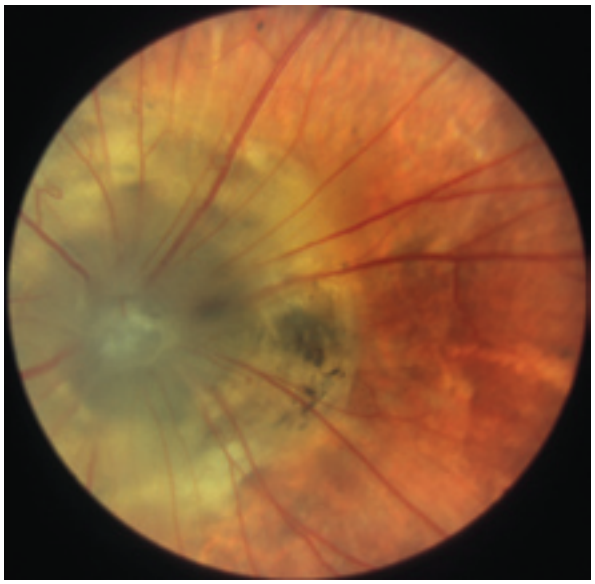
Poor vision in the affected eye.

SIGNS

Most cases are unilateral. Visual acuity in the affected eye usually ranges between 20/100 (6/30) and hand movements. There may be an associated strabismus and/or myopia.

The optic disc is enlarged, with a funnel-shaped central core of pale glial tissue surrounded by an elevated pigment ring. Numerous, straight blood vessels emerge from the perimeter of the excavation, rather than originating at a central blood vessel as they would in a normal eye. The increased disc diameter, the abnormal vascular pattern and excavation of the disc have some elements in common with an optic disc coloboma.

A careful retinal examination is indicated for signs of serous (non-rhegmatogenous) retinal detachment.



Morning glory syndrome showing central pale core of optic nerve, surrounded by grey pigmentation. The retinal vessels are prematurely branched, and straightened

PREVALENCE

Very rare. Females are affected twice as often as males.

SIGNIFICANCE

Vision in the affected eye is severely impaired and there is a risk of retinal detachment.

DIFFERENTIAL DIAGNOSIS

Coloboma of the optic disc.

SEE ALSO

Optic nerve head pit, Glaucoma classification, Retinal detachment classification.

MANAGEMENT

Advice

Being a congenital malformation, there is no specific treatment. The patient often has normal vision in the other eye. Associated conditions, including endocrine abnormalities, may require specialist assessment and treatment. The patient should be educated with regard to the symptoms of retinal detachment, and advised of the risks of contact sports and the need for eye protection.

Laser or incisional surgery

Retinal detachment may be treated with *pars plana* vitrectomy, laser photocoagulation, and/or intravitreal tamponade with gas or silicone oil.

Review

Routine annual review may be indicated in view of the increased risk of retinal complications.

The full series of these articles will be available in the book *Posterior Eye Disease and Glaucoma A-Z* by Bruce AS, O'Day J, McKay D and Swann P. £39.99. For further information click on the Bookstore at **opticianonline.net**

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