What You Should Know About Unilateral Acute Idiopathic Maculopathy

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Unilateral acute idiopathic maculopathy (UAIM) is a condition causing blurred and distorted central vision due inflammation and accumulation of fluid under the central retina (the macula). It typically affects young, healthy people, often following a flu-like illness. It generally resolves spontaneously within several days to weeks with return of vision to near normal levels. Although usually unilateral, rarely both eyes are involved. Occasionally it accompanies pregnancy, and rare cases in association with human immunodeficiency virus infection have been reported.¹

What Causes Unilateral Acute Idiopathic Maculopathy?

There is no proven cause at this time because the cases are rare and selflimited. One hypothesis is that coxsackie virus infection is the cause.²

What Can Be Done In Unilateral Acute Idiopathic Maculopathy?

At the first visit to the retina specialist, a special set of photographs of the retina is obtained by injecting a dye in the vein of the arm and photographing the dye as it circulates through the retina. This procedure, called a fluorescein angiogram or indocyanine green angiogram (depending on which dye is used), helps to make the diagnosis (figs. 1-2). UAIM has certain characteristics that the ophthalmologist looks for, such as early, irregular hypo- and hyperfluorescence and late intense hyperfluorescence. Optical coherence tomography scans are taken to define the layers of the retina involved. In typical cases, fluid is present under the retina and the retinal pigment epithelium may be disturbed (fig. 3). Blood may be drawn to look for serological evidence of infection with coxsackie virus or other organisms.

There is no treatment required in UAIM, because it spontaneously resolves. In fact, the main hazard is getting unnecessary treatment because of an erroneous diagnosis. For example, UAIM has been misdiagnosed as idiopathic choroidal neovascularization and has been treated unnecessarily with photodynamic therapy.³ Fig. 1



Legend: Retinal photographs of a patient with Unilateral Acute Idiopathic Maculopathy. The left side is a photograph of the patient's normal right eye. The right side is a photograph of the affected left eye.

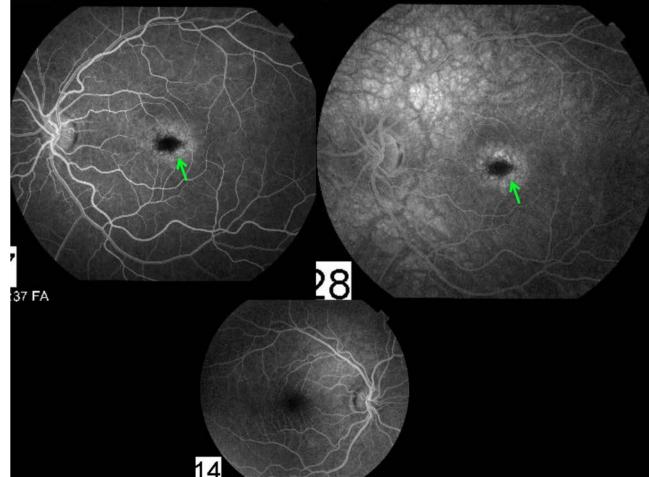
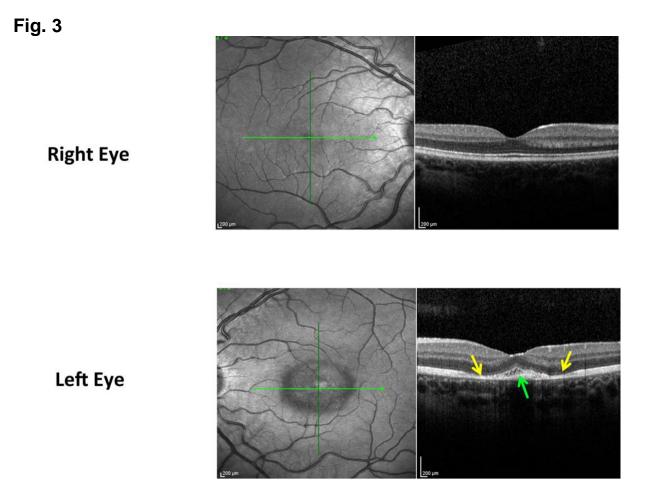


Fig. 2

Legend: Fluorescein angiography of a patient in the resolving stage of UAIM. The green arrow indicates a bulls-eye lesion of the left eye, in which the atrophic retinal pigment epithelium allows the underlying choroidal hyperfluorescence to show through.



Legend: Spectral Domain – OCT in a patient with UAIM. The right eye is normal. The left eye has loss of the perifoveal inner segment/ outer segment junction (yellow arrows) and a collection of hyperreflective subretinal material (green arrow).

What Is The Long Term Prognosis?

Usually patients retain good vision after UAIM. The macula will usually show some pigmented disturbance, often in the form of a bulls-eye pattern.¹

If you have questions after reading this brochure, more in-depth research on your own is possible through the PubMed website of the National Library of Medicine, <u>http://www.ncbi.nlm.nih.gov/entrez/query.fcgi</u>. You can also submit a question online at the home page (click on Contact) of my website <u>www.retinareference.com</u>.

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References

- 1. Freund KB, Yannuzzi LA, Barile GR, et al. The expanding clinical spectrum of unilateral acute idiopathic maculopathy. Arch Ophthalmol 1996;114:555-559.
- 2. Beck AP, Jampol LM, Glasser DA, Pollack JS. Is coxsackievirus the cause of unilateral acute maculopathy? Arch Ophthalmol 2004;122:121-123.
- 3. Freund KB, Bennett SR, Kokame GT, Merrill P. Diagnostic and Therapeutic Challenges. Retina 2002;22:487-492.