

Case of the Month

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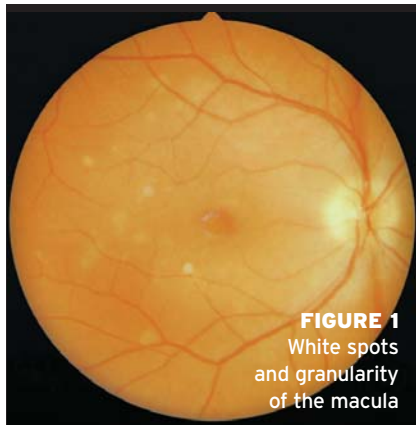


FIGURE 1
White spots
and granularity
of the macula

›CASE

A 28-year-old white female presented to her primary-care provider complaining of flashes in her right eye that had started after a flulike illness and a tension headache that had lasted for 2 weeks. The flashes began in the peripheral field and evolved into a constant, shimmering gray blur. The visual defect hindered the patient's visual acuity, night vision, and ability to focus on the page when reading.

HISTORY The patient described her vision as being cloudy with holes of clarity, as if she was looking through a filter. She had no history of pain or trauma and no family history of visual defects. Cloudiness in the right eye was noted during a routine eye examination two months before this episode, but no action was taken. She was taking OTC migraine medication for tension headaches, sertraline for anxiety, budesonide intranasal for allergies, and ethinyl estradiol plus norgestimate for birth control. She reported no other medical problems.

PHYSICAL EXAMINATION The patient's visual perception was 20/40¹ in the right eye and 20/20 in the left eye while wearing eyeglasses. In her right eye, the pupil had a decreased response to stimulation with light and the peripheral field was diminished at the temporal aspect. Fundoscopic examination revealed mild papilledema

and indistinctive margins around the optic disc. The patient was referred to an ophthalmologist.

The ophthalmologic examination revealed *centrocecal scotoma*, or a central vision loss extending to the blind spot; decreased color vision; and loss of visual acuity. A fundoscopic examination of the right eye revealed white, flattened spots on the retinal pigment epithelium with orange granularity of the macula (see Figure 1). No abnormalities were found in the left eye. A Humphrey visual field test revealed an enlarged blind spot and reduced visual field in the right eye. Slit-lamp biomicroscopy results were negative for both eyes.

›WHAT IS YOUR DIAGNOSIS?

- *Retinal detachment*
- *Acute posterior multifocal placoid pigment epitheliopathy (APMPPE)*
- *Multiple evanescent white dot syndrome (MEWDS)*
- *Central retinal vein occlusion*

›DISCUSSION

The correct diagnosis is multiple evanescent white dot syndrome. The patient was referred to a retinal specialist for confirmation of the diagnosis. MEWDS is a rare disease that predominantly affects women aged 15 to 40 years.¹ It manifests as an acute, multifocal infection of the retina that is concentrated in the posterior pole of the eye with granularity of the macula.² Most patients who develop MEWDS are nearsighted and therefore have a weakened retina that is more prone to infection.³ Patients may complain of a sudden, painless, monocular visual disturbance with flashes; color vision disturbances; and centrocecal scotoma.⁴ Symptoms usually appear after a viral illness, such as an upper respiratory infection,¹ or a recent vaccination.^{5,6}

On examination, visual acuity ranges from 20/40 to 20/400. Multifocal white dots and photoreceptor cells can be seen on fundoscopic examination.⁷ The macula may appear orange and granu-

lar. The optic disc may have mild papilledema and undistinguishable margins.

TREATMENT MEWDS is a self-limiting disease, and no medication or treatment is needed. The disease resolves in 3 weeks to 6 months.

Granularity of the fovea remains even after visual acuity resolves. In rare instances, scarring affects the visual acuity in the effected eye. MEWDS can recur, usually in the opposite eye.¹

COMMENTS The presentation of MEWDS often is puzzling and clinicians react with emergency protocol to save the patient's vision. When considering MEWDS in the differential diagnosis, the patient should be referred promptly to an ophthalmologist to confirm the diagnosis. Follow-up examinations should continue until the patient's visual acuity returns to normal. [JAAPA](#)

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