A Case of Multiple Evanescent White Dot Syndrome in a Young Adult Male

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Introduction

- Multiple evanescent white dot syndrome (MEWDS) is a rare inflammatory eye condition characterized by numerous pale whitish dots in the posterior pole and the mid periphery.
- It is a unilateral disease that typically affects young to middle-aged female with myopia.
- In up to 50% of cases, the condition is preceded by a flu-like viral episode.
- Although initial vision loss is variable, MEWDS is a self-limited disease with an excellent prognosis in terms of visual recovery.
- Most cases resolve without any treatment.

Imaging

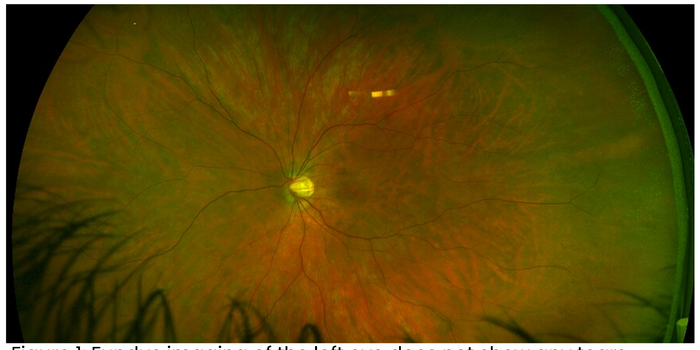

Figure 1: Fundus imaging of the left eye does not show any tears, breaks, or holes.

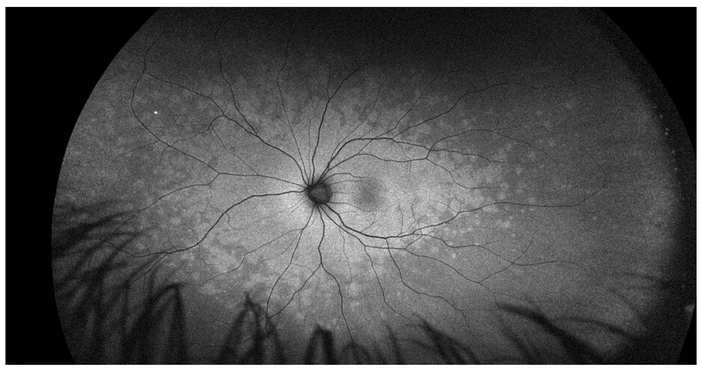

Figure 2: Fundus autofluorescent imaging of the left eye showing hyperautofluorescent patchy lesions.

Case Description

- The patient is a healthy 27-year-old myopic male with no significant past medical history who presented to an outpatient ophthalmology clinic with the chief complaint of decreased vision in his left eye.
- Several days prior, he noted a sudden increase in floaters with concurrent haziness in the left eye. Patient also reported that the vision in his left eye was "yellowed" compared to the right.
- The patient denied any mitigating or exacerbating factors or similar episodes in the past. The patient denied any flashes of light or trauma. The patient denied recent or concurrent URI, foreign travel, new foods, dietary supplement, or sexual activity.

Workup and Diagnosis

- Vision was OD 20/20 and OS 20/50.
- Intraocular pressures were normal. Pupils were normal without an afferent pupillary defect. Confrontational visual fields and ocular motility exams were both normal.
- Slit lamp examination of the left eye was normal without evidence of intraocular inflammation. Funduscopy was grossly unremarkable.
- Fluorescein angiography revealed areas with early punctate hyperfluorescence in a “wreath-like” pattern and late staining, and autofluorescence showed hyperautofluorescent patchy lesions.
- This constellation of findings was most suggestive of MEWDS.

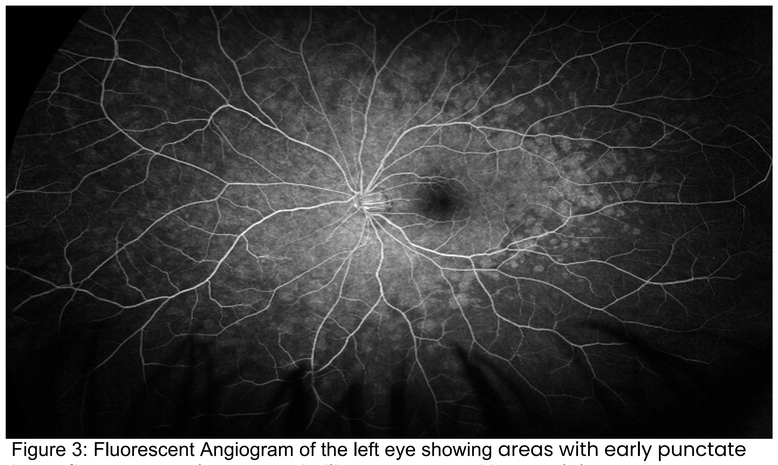

Figure 3: Fluorescent Angiogram of the left eye showing areas with early punctate hyperfluorescence in a “wreath-like” pattern and late staining

Follow Up

- The patient was managed with close monitoring with serial follow-up visits.
- By seven months after presentation, the vision in patient’s left eye had improved to 20/20 with a notable decrease in subjective floaters, haziness, and "yellowing" of the vision.
- Fundus autofluorescence imaging demonstrated resolution of the patchy hyperautofluorescent lesions throughout posterior pole.

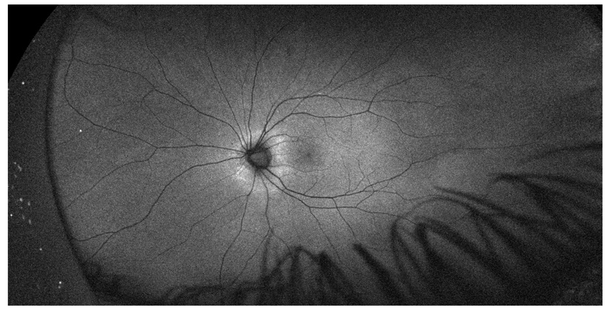

Figure 4: Fundus autofluorescent of the left eye showing resolution of patchy hyperautofluorescent lesions over posterior pole.

Discussion

- Patients describing a unilateral decrease in vision with photopsia, in the context of foveal granularity without significant inflammation, with angiographic early punctate hyperfluorescence in a wreath-like pattern and late staining, should alert clinician to MEWDS.
- This relatively uncommon condition is typically self-limited and affects young women.
- While the pathogenesis is unknown, the prognosis is excellent.
- Most patients recover their vision without requiring treatment, although many describe a persistent enlarged blind spot. Approximately 10% of patients experience a recurrence later on.

References

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