Optical Coherence Tomography Findings in Multiple Evanescent White Dot Syndrome

Case Report

A 17-year-old girl presented with blurred vision in the left eye and was diagnosed with multiple evanescent white dot syndrome. Vision was 20/20 in the right eye and 20/40 in the left eye. Examination showed an enlarged blind spot, deep retinal white spots, and foveal granularity most pronounced in the left eye (Fig. 1, A and B). Fluorescein angiography displayed early blocking and late staining with the typical wreathlike hyperfluorescence in the middle phase as described by Kozielec et al[1] (Fig. 2). There was also staining of the nerve and vessels around the nerve. Optical coherence tomography (Stratus OCT 3000; Zeiss) through a white spot showed a dome-shaped reflective lesion in the subretinal space, while the fovea was normal (Fig. 3, A and B). There was increased reflectivity in the choroid below the subretinal material. Three weeks later, visual acuity was 20/20 in both eyes, and her symptoms had resolved. Optical coherence tomography through the same white spot now showed a decrease in size of the subretinal material with slightly less reflectivity in the choroid (Fig. 4). Seven weeks after presentation, optical coherence tomography showed almost complete resolution of the subretinal material but continued reflectivity in the choroid (Fig. 5). Five months after presentation, there was persistent but slightly diminished reflectivity in the choroid (Fig. 6).

Comment

Multifocal choroiditis is shown to have choroidal inflammation when studied histopathologically.[2] Multiple evanescent white dot syndrome has preceded or occurred after multifocal choroiditis and punctate inner choroidopathy in the same patient.[3] The findings reported here suggest that multiple evanescent white dot syndrome may be a chorioretinal disorder rather than involving only the outer retina. The material in the subretinal space resolves as symptoms abate, but even 5 months later, there are choroidal findings. The white dot syndromes may share a similar pathophysiology.

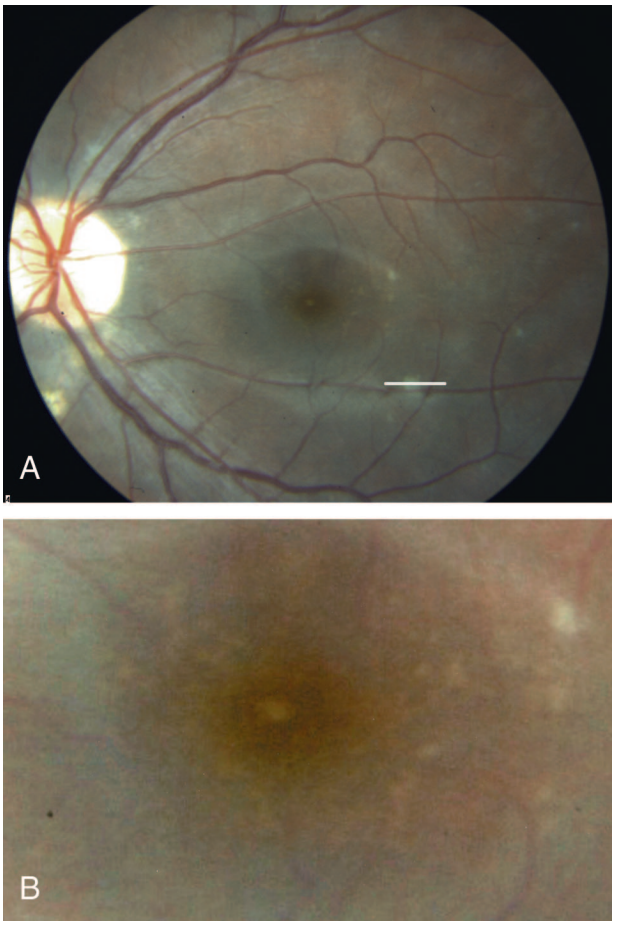

Fig. 1. **A,** Fundus photograph of the left eye at presentation demonstrating foveal granularity and white dots. Optical coherence tomography was performed through the spot indicated by the white line. **B,** Magnification of the left macula demonstrating foveal granularity.

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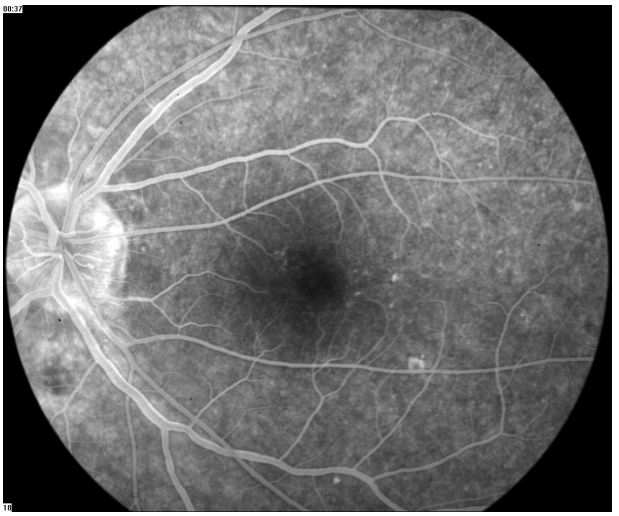

Fig. 2. Full-phase angiogram of the left eye demonstrating wreathlike changes of the white spot.

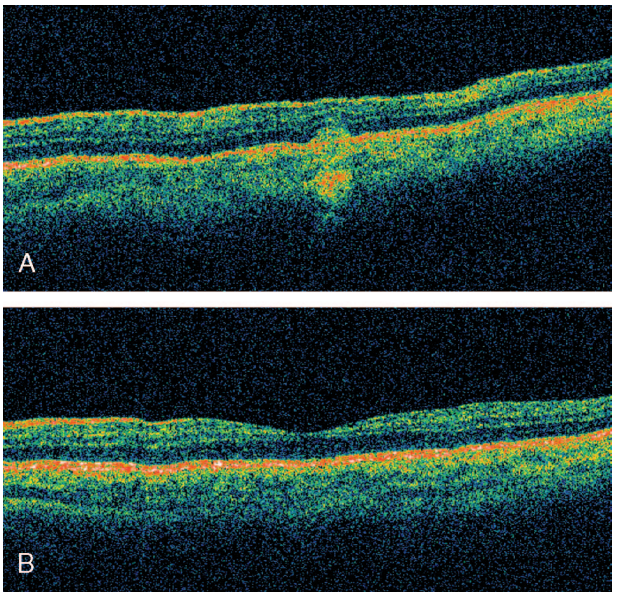

Fig. 3. **A,** Optical coherence tomography at presentation demonstrating subretinal domelike accumulation of material. Note intense reflectivity in the deep choroid immediately below the subretinal material. **B,** Optical coherence tomography at presentation demonstrating a normal foveal contour and thickness.

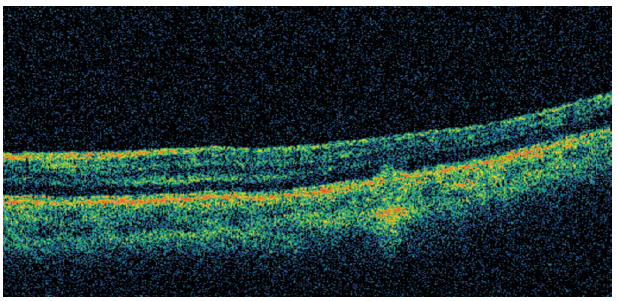

Fig. 4. Optical coherence tomography 3 weeks later showing less material in the subretinal space with slightly less reflectivity in the choroid.

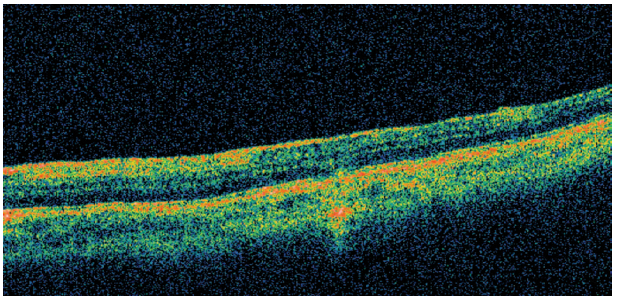

Fig. 5. Optical coherence tomography 7 weeks after presentation showing almost complete resolution of the subretinal material with continued increased reflectivity in the choroid.

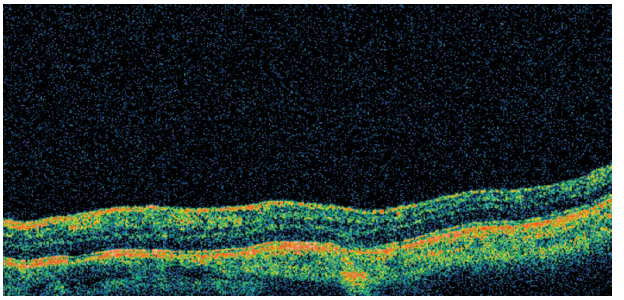

Fig. 6. Optical coherence tomography 5 months after presentation showing complete resolution of the subretinal material with persistent although slightly diminished reflectivity in the choroid.

References

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