



Optical Coherence Tomography Angiographic Observation on Two Patients with Acute Multifocal Placoid Pigment Epitheliopathy

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Purpose

To report the Split-Spectrum Amplitude-Decorrelation Angiography (SSADA) based Optical Coherence Tomography Angiography (OCTA) findings on two patients with Acute Multifocal Placoid Pigment Epitheliopathy (AMPPE).

Methods

Two patients with clinically diagnosed AMPPE were followed from presentation to resolution using a combination of imaging techniques including SSADA based OCTA, SD-OCT, Fluorescein angiography, and fundus photography. Clinical correlation between the imaging methods were observed with emphasis on the OCTA findings.

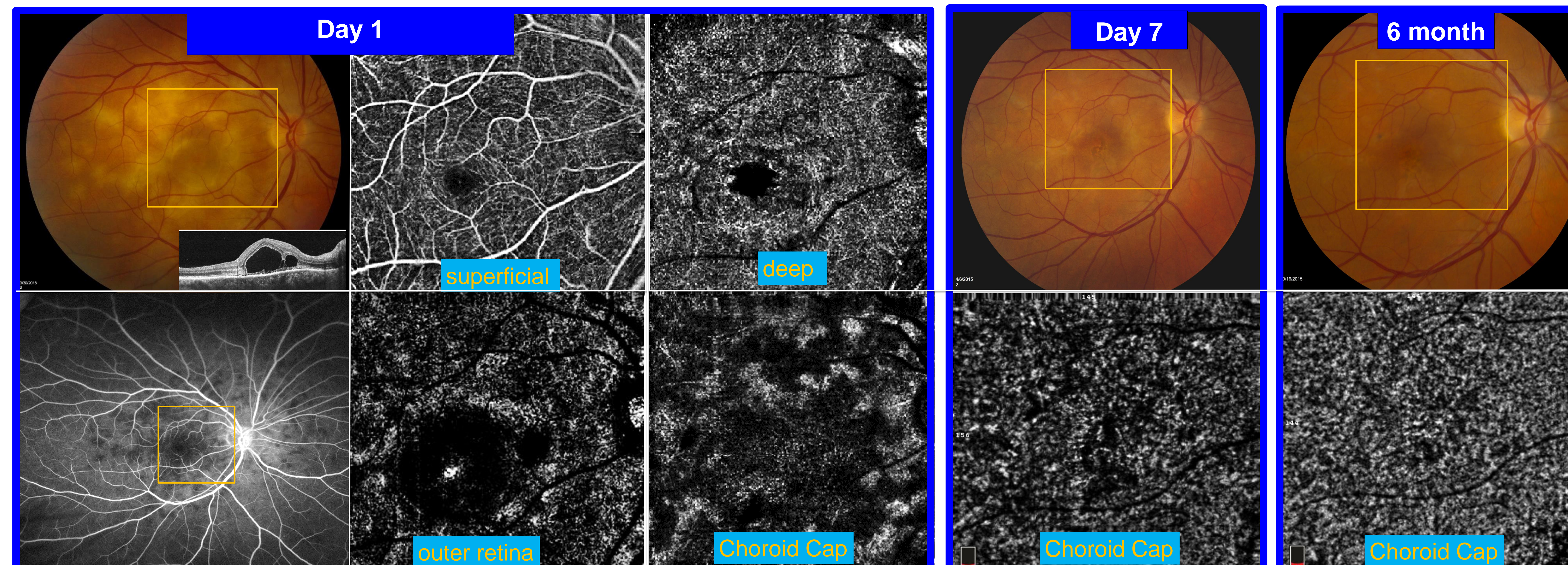
Results

OCTA was used to successfully view the vascular patterns of each retinal and choroidal layer of two patients with AMPPE. During the acute phase, OCTA detected low flow corresponding to the center of the placoid lesions, but increased flow was noted at the border of each lesion. This was specifically seen with the choriocapillaris slab was isolated. There were no significant change in the superficial and deep retinal layers. The flow eventually returned to nearly normal in both patients. Patient two developed significant vasculitis after 21 days.

Conclusions

OCTA showed significant deprivation of blood flow in the center of each placoid lesion with increased flow along the edges of the lesions in the choriocapillaris. This suggests a vasculitis of the choriocapillaris. The other retinal layers were lacking pathology. One alternate hypothesis is that the low flow could be due to a blocking defect but this does not explain the increased flow around the edges of the lesions indicative of a vasculitis at this layer. One patient demonstrated retinal vasculitis which may be consistent with reports of CNS vasculitis with this disease

Patient 1



Patient 2

