

BRAO

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Introduction

We have been aware of the advantages of ultrawide field angiography for many years, but only recently has such a unit become practical. In this case, the P200MA platform was of pivotal importance in the management of a patient with an unusual presentation.

History

A 45 year old woman returned from a hiking trip to the Rocky Mountains at high altitude where she had noted a wedge-shaped area of scintillating lights in the left eye followed by loss of field in this area several days later. She presented one week after her symptoms began. She was a healthy woman taking no medications and had no history of systemic disease. She was not taking birth control pills.

Examination

Visual acuity was 20/20 OU but visual fields on confrontation showed a superior temporal field cut which was absolute. Goldmann field testing demonstrated that the field cut actually extended beyond the vertical and horizontal meridians into the adjacent quadrants. On funduscopic examination, the right eye was normal. In the left eye, the retinal vessels were very attenuated inferior nasal to the disc. Also seen was an unusual parabolic-shaped zone of subtle dulling of the choroidal details and at the border with the normal retina, there was a 1/4 of a disc diameter wide stippled yellowish white border. There was no evidence of any whitish lesions anywhere in either eye other than in this zone.

A fluorescein angiogram was obtained using the P200MA system. It showed no retinal or choroidal leakage in either eye but revealed an absence of perfusion in the region of concern. The arteries were extremely thready as were the venules; no boxcarring was present within the vasculature. The optic nerves appeared normal.

Because of the white yellow border, the working diagnoses included possible chorioretinitis versus an ischemic episode. Multiple blood tests as well as a work-up of the carotid arteries were obtained. No abnormalities were found in this ancillary testing.

Conclusion

This case was unusual in that the pale whitish yellow border seen on the examination suggested potential inflammatory or infectious conditions such as might be seen with acute retinal necrosis from HSV or other viral agents. Ultrawide fluorescein angiography, however, showed no evidence of vasculitis or retinitis as no leakage was present in either eye in any phase of the angiogram.

The most likely series of events here was that a branch retinal artery occlusion occurred which was exacerbated by her hiking at high altitude causing intraretinal edema which cleared slowly after the insult. When we examined her several days later, only a sliver of this retinal discoloration remained and it was, ironically, located adjacent to the normal retina.

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