optomap® *fa*

Case Study: PDR

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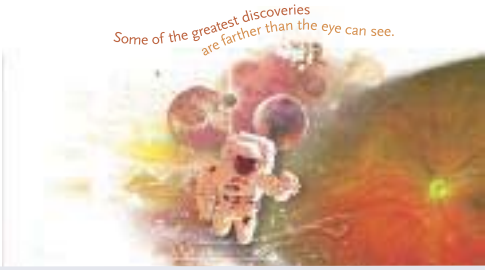


History

A 70-year-old female had been successfully treated for high risk proliferative diabetic retinopathy with targeted photocoagulation to areas of ischemic retina. Treatment was guided by ultra-widefield angiography. She had done well for approximately 12 months, but subsequently presented with complaints of decreased vision in both eyes. She had suffered poor glycemic control and suboptimal management of her hypertension with multiple episodes of little or no compliance with anti-hypertensives.

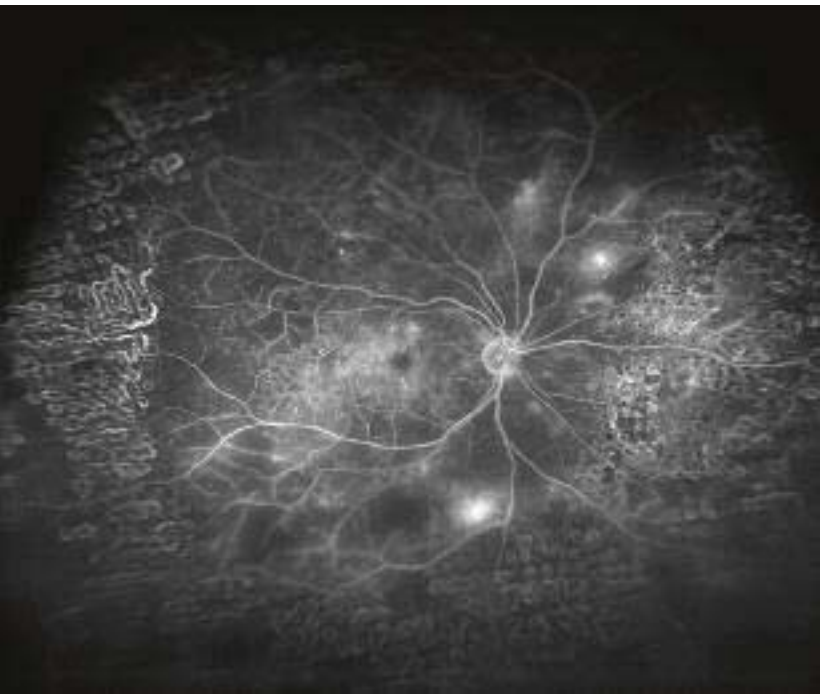
Examination

On examination, visual acuities were 20/60 bilaterally. The anterior segment examination showed a mild nuclear cataract in both eyes but no rubeosis. Dilated fundoscopy revealed clinically significant macular edema in both eyes. There were two areas of neovascularization seen clinically, temporal to the macula and in the nasal midperiphery, in the left eye.

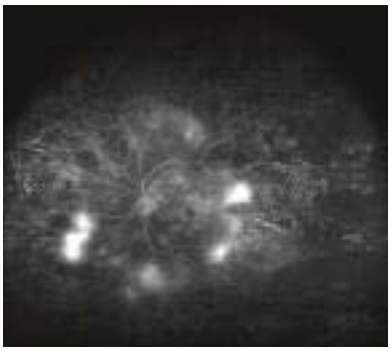
An ultra-widefield **opto**map® *fa* demonstrated multiple neovascular fronds as well as angiographic macular edema in both eyes. There were multiple areas of capillary non-perfusion in the midperipheral retina bilaterally. Both eyes had evidence of a moderately dense pattern of targeted retinal photocoagulation. The ischemia had clearly advanced posteriorly.

Conclusion

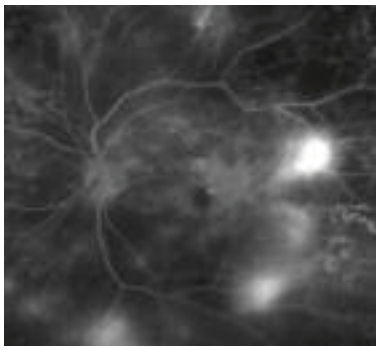
The ultra-widefield fluorescein angiogram corroborated the clinical diagnosis of macular edema. In addition, the angiogram clearly showed multiple areas of neovascularization in both eyes, some of which were not detected on clinical examination. With the macular edema and active proliferative retinopathy, the patient may benefit from targeted peripheral retinal photocoagulation, focal macular laser, and/or anti-VEGF therapy. Alternatively, she may qualify for entry into a clinical research protocol, such as the Diabetic Retinopathy Clinical Research Network.



Widefield **opto**map® *fa* of the right eye.



Widefield **opto**map® *fa* of the left eye captured with the Optos® device.



Left Eye Macula, captured with the Optos® ResMax™ feature.

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