

Swept-source OCT Angiography and occlusive retinal vasculitis

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Purpose

To describe swept-source optical coherence tomography angiography (SS OCTA) findings in eyes with occlusive retinal vasculitis.

Methods

This prospective study included 15 patients (25 eyes) diagnosed with occlusive retinal vasculitis involving the posterior pole and/or the periphery. All patients were evaluated using fluorescein angiography (FA), spectral domain optical coherence tomography, and SS OCTA.

Results

The causes of occlusive retinal vasculitis included Behcet disease in 12 patients (21 eyes), ocular tuberculosis in 1 patient (2 eyes), West Nile virus infection in 1 patient (1 eye) and rickettsiosis in one patient (1 eye). SS OCTA was superior to FA in evaluating perifoveal microvascular changes. It showed in twenty eyes (80%) areas of retinal capillary nonperfusion/hypoperfusion with or without associated rarefied, dilated, or shunting vessels. The deep retinal capillary plexus was more severely affected than the superficial capillary plexus.

Conclusions

SS OCTA allowed better evaluation of macular ischemia than FA in eyes with occlusive retinal vasculitis. The deep capillary plexus appeared to be more severely involved than the superficial capillary plexus.