

Evidence of choriocapillaris hypoperfusion on Swept-source OCT Angiography in specific inflammatory maculopathies

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Purpose

To describe swept-source optical coherence tomography angiography (SS OCTA) findings in patients with specific inflammatory maculopathies.

Methods

This study is a retrospective review of the chart of 5 patients (7 eyes) diagnosed with specific inflammatory condition. All patients were evaluated using fluorescein angiography (FA), indocyanine green angiography (ICGA), spectral domain optical coherence tomography, and SS OCTA.

Results

The patients were aged between 21 and 48 years. They were affected as follows: unilateral acute idiopathic maculopathy (UAIM) (one patient, one eye), relentless placoid chorioretinitis (one patient, one eye), multiple evanescent white dot syndrome (MEWDS) (one patient, one eye), acute posterior multifocal placoid pigment epitheliopathy (one patient, two eyes) and tuberculosis serpiginous-like choroiditis (one patient, two eyes). SS OCTA showed multifocal (5 eyes) or unifocal (2 eyes) areas of reduced flow within the choriocapillaris. Areas of choriocapillaris flow deficit correlated with hypofluorescent areas seen on ICGA. Sequential follow-up SS OCTA examinations showed significant improvement of choriocapillaris perfusion in 6 eyes and no change in 1 eye (UAIM).

Conclusion

SS OCTA reveals areas of choriocapillaris flow reduction in specific inflammatory maculopathies. In these conditions, the inner choroid seems to be the primary site of a transient or persistent ischemic process.