OCT Angiography

Case Study of the Month

PATIENT HISTORY
A 78-year old male with neovascular AMD initially presented with a greater than two-week history of poor central vision in the left eye. Induction anti-VEGF therapy of three monthly injections of Avastin® was instituted, but visual acuity only improved from 20/800 to 20/400. The persistent poor visual acuity was cause for concern.

SUMMARY
Clinical exam and structural OCT indicated that treatment had resolved the subretinal fluid, but poor visual acuity continued. OCT angiography (OCTA) confirmed the presence of an active neovascular network that could potentially be the cause of the poor vision. The patient was switched to Eyelea® to address the active network, with ongoing monitoring of the treatment response via OCTA.

AngioVue™ OCTA is an efficient and non-invasive test that provided new information, which the treating physician used to alter the treatment protocol.

DIAGNOSTIC IMAGING
Baseline fluorescein angiography and OCT B-scan showed the presence of leakage consisting of subretinal fluid with mild subretinal blood. Clinical exam and OCT B-scans taken after three monthly injections of Avastin demonstrated resolution of the subretinal fluid; however, OCTA revealed the presence of an active neovascular network.

Baseline
Fundus autofluorescence shows mild subretinal blood and exudate. Fluorescein angiography and OCT B-scan confirm leakage and subretinal fluid consistent with an active choroidal neovascular membrane.

Follow-up
Fundus autofluorescence shows that subretinal hemorrhage has resolved and no residual fluid is noted on OCT B-scan. However, AngioVue OCTA reveals an active neovascular network in the outer retinal zone.

Case courtesy of Alan Franklin, MD, PhD Retina Specialty Institute