Image of the Month

January/February 2019

BACKGROUND

This shows a case of a patient with an older, treatment naïve, choroidal neovascularization (CNV) on the left eye. The top 3 images were taken on a Topcon® DRI Triton™ Swept Source OCT with Swept Source OCT Angiography.[1] The top left image (A) is a full color fundus photograph. The top middle inlay (B) is an OCT Angiography of the CNV. The top right (C) is a Swept Source OCT B-scan taken at 1050nm wave length. The bottom left image (D) is a conventional fluorescein angiography of the same case and the bottom right image (E) is a B-scan taken with a conventional 840nm Spectral Domain OCT. What is remarkable about this case is that the Swept Source OCT Angiography clearly shows the outline and details of the neovascular membrane that can be seen in the fluorescein angiography even though there is considerable retinal pigment epithelium detachment and retinal edema. The Swept Source B-scan is able to penetrate the retinal edema, the retinal pigment epithelium itself, and the choroid all the way down to the choroidal scleral interface. The conventional Spectral Domain OCT is not able to visualize structures below the retinal pigment epithelium detachment. A comprehensive visualization of the choroid may become more important as we struggle to understand the source of these types of pathologies.

—Carl Glittenberg, MD, FEBO

Diagnosis
Older Mixed Type Choroidal Neovascularization (CNV)

Captured with
Topcon DRI OCT Triton

Images Courtesy of
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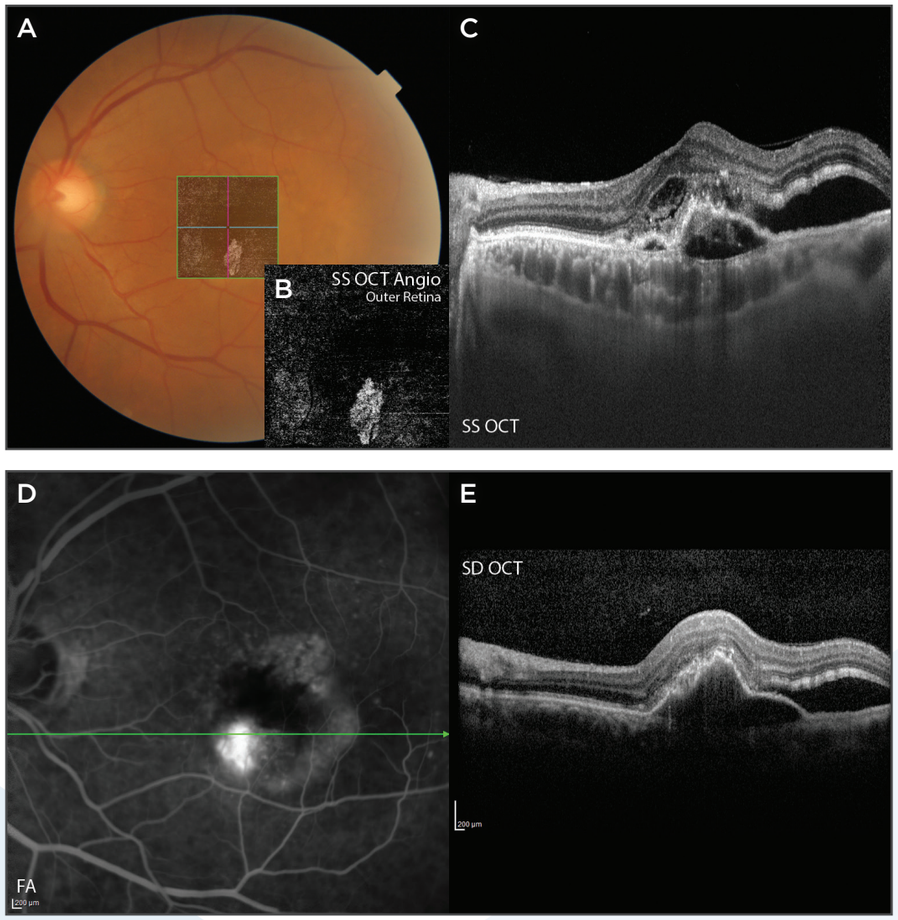
DRI OCT Triton Images
A. Color Fundus Image
B. OCT Angiography Image
C. Swept Source OCT Image

Conventional Images
D. Fluorescein Angiography Image
E. Spectral Domain OCT Image

1. OCT Angiography is not available for sale in the US.

The opinions, ideas, views and assumptions expressed are the author's own and do not necessarily represent the views of Topcon, nor do they constitute advice from Topcon.

Older Mixed CNV As Seen with Swept Source OCT and OCT Angiography[1]



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