Swept Source OCT Enface Choroidal Vasculography (CVG)



DiagnosisSub Choroidal Mass

Captured with

Topcon DRI OCT Triton¹

Images Courtesy of

Carl Glittenberg, MD.
Topcon Europe Medical,
Capelle aan den IJssel, Netherlands;
Karl Landsteiner Institute for
Retinal Research and Imaging,
Vienna, Austria

DRI OCT Triton Images

A. Topcon IMAGEnet* 6 Screenshot B1-B4. CVG images of the scleral protrusion at different heights

- C. B-Scan
- D. Color Fundus Image
- E. OCT Angiography Image

1. Not for sale in the US

BACKGROUND

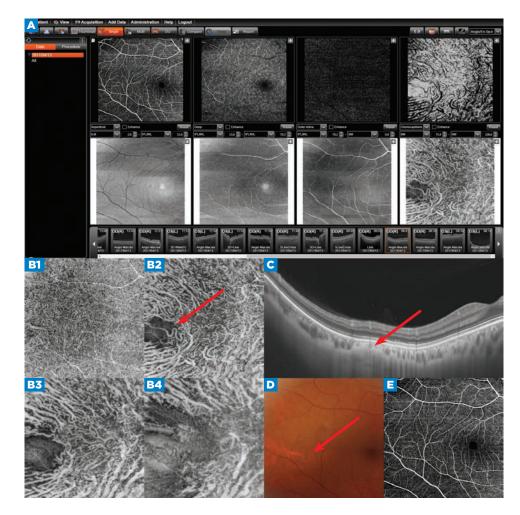
During a routine ophthalmic examination a 57-year-old patient presented with a brightly visible choroidal vessel located temporally to the macula (**D**). A high definition 12 mm OCT scan was performed using the Topcon DRI Swept Source OCT Triton' and a small sub choroidal scleral protrusion was identified (**C**). Subsequently a 9mm x 9mm Swept Source OCT-A scan was performed using the same instrument. The retinal flow data was unremarkable (**E**). However in the structural enface OCT data, on which the OCT-A data is based, the choroidal vasculature can clearly be visualized (**B1-B4**).

Using Topcon IMAGEnet* 6, a process referred to as "Choroidal Vasculography" (CVG) was performed in order to enhance the visibility of the choroidal vessels. This included reversing the coloring in the enface image, creating a 26 micron Bruch's Membrane fit slab and moving this slab in 2.6 micron increments down from Bruch's Membrane to the choroidal scleral interface in order to visualize the choroidal vessels at different heights.

The CVG (**B1-B4**) clearly shows where the scleral protrusion pushes aside most of the choroidal vasculature, and pushes up and flattens the choroidal vessel that was originally seen in the fundus image.

This case clearly show the advantage of using the 1050 nanometer wavelength inherent in Swept Source technology to visualize the deep choroid.

Learn more about CVG at http://bit.ly/2qw4sMJ.



Submissions for the "Image of the Month" can be made at, topconmedical.com/imageofthemonth.

TOPCON CORPORATON topconmedical.com

