Circumscribed choroidal hemangioma

Category(ies): Retina, Vitreous

Contributor: Jesse Vislisel, MD

Choroidal hemangiomas are benign vascular hamartomas that can be diffuse (as seen in the case of Sturge-Weber syndrome) or circumscribed as shown here. They typically are red-orange in color with indistinct margins and are located in the posterior pole. There may be overlying retinal pigmented epithelium (RPE) changes or orange pigment. The lesions may have associated intraretinal or subretinal fluid. They display high internal reflectivity on A-scan echography.

Figure 1

Contributor: Jesse Vislisel, MD

Photographer: Randy Verdick, FOPS (figs. 1a, 1b); Antionette Venckus, CRA (fig. 1f)

These photographs show the appearance of a circumscribed choroidal hemangioma before and after treatment with photodynamic therapy (PDT). The lesion appeared as an elevated choroidal mass with overlying orange plaques and RPE atrophy. Vascular leakage from the lesion resulted in macular edema overlying the lesion, as seen in the OCT, and surrounding subretinal fluid resulting in an exudative retinal detachment, as seen on the B-scan echography. A-scan echography revealed high internal reflectivity, which is typical for these lesions. Overlying fibrosis can be seen in the post-treatment photograph. The treatment resulted in a reduction in tumor height and decreased subretinal fluid. It was successful in decreasing the patient's metamorphopsia.

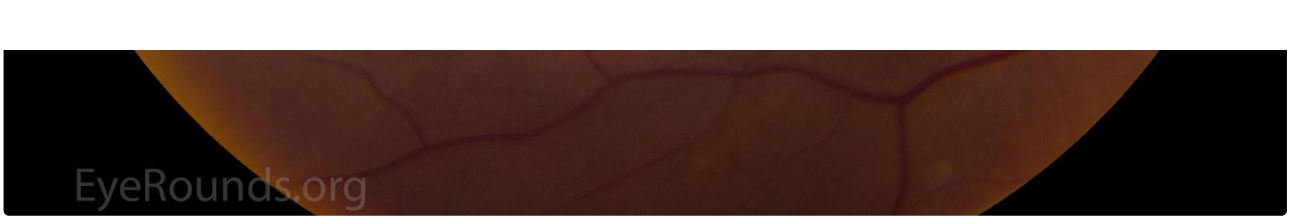

Figure 1a

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Figure 1b

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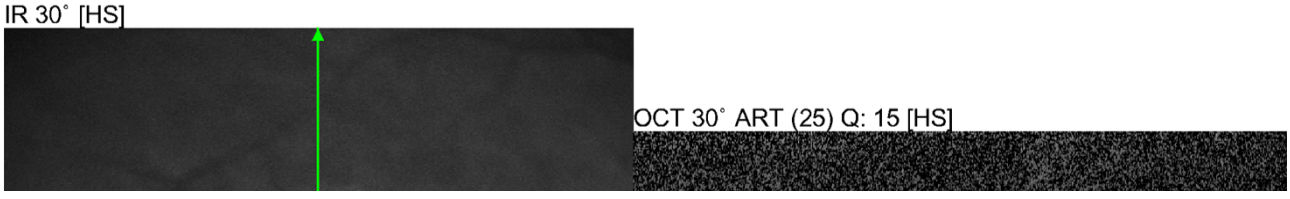

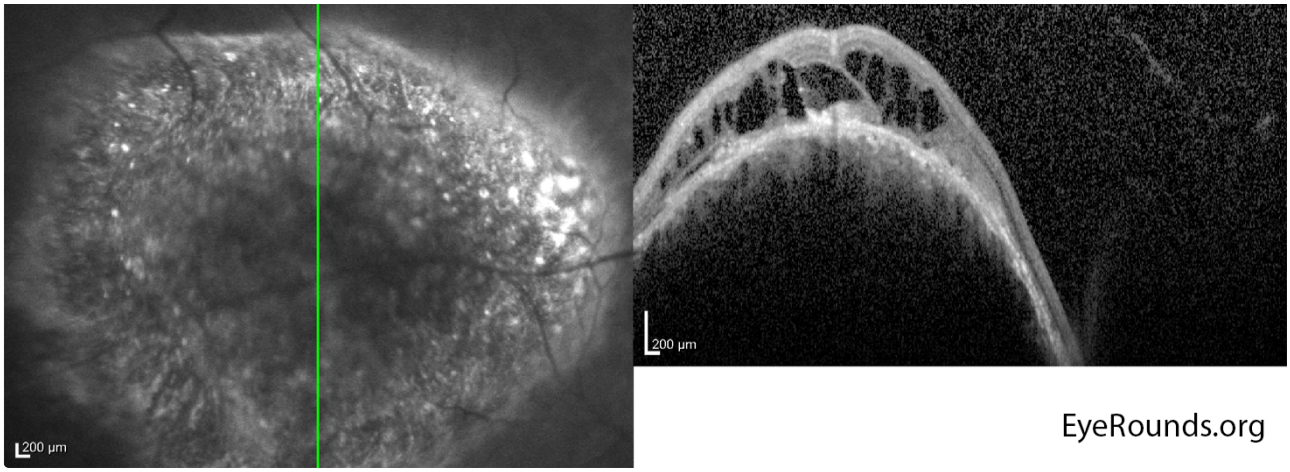

Figure 1c

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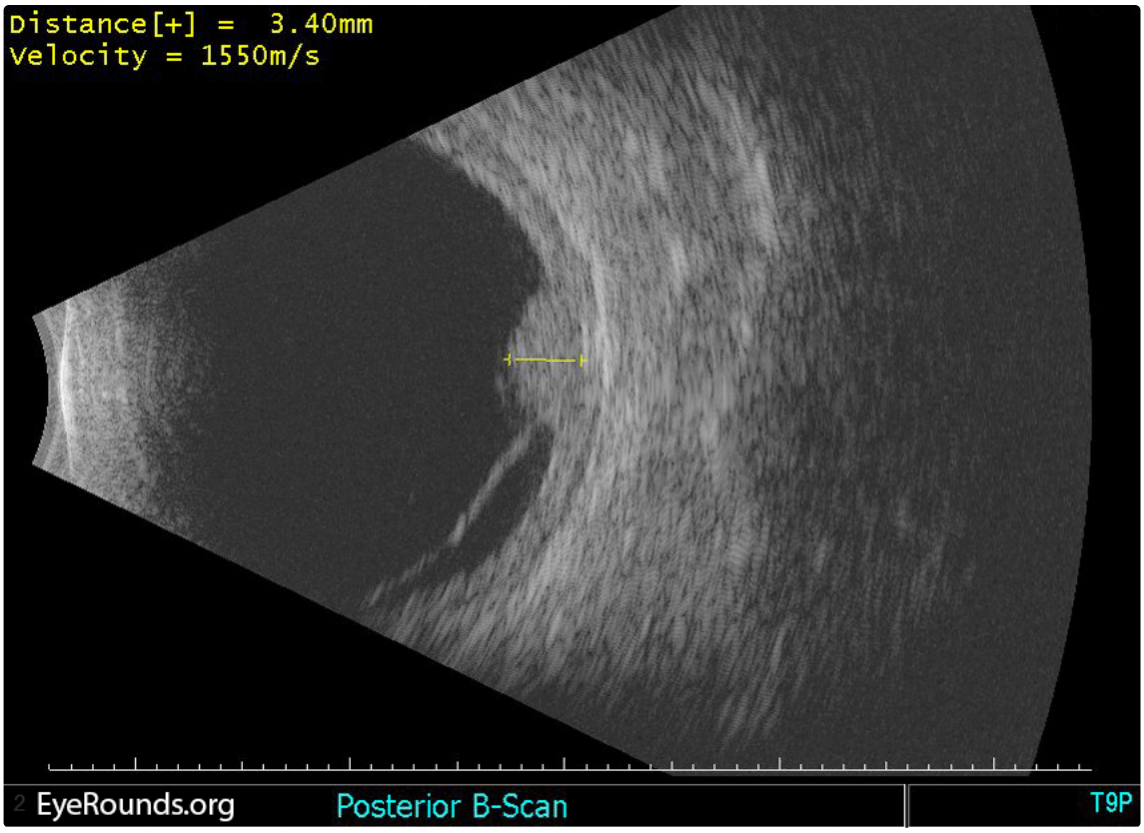

Figure 1d: B-scan ultrasound

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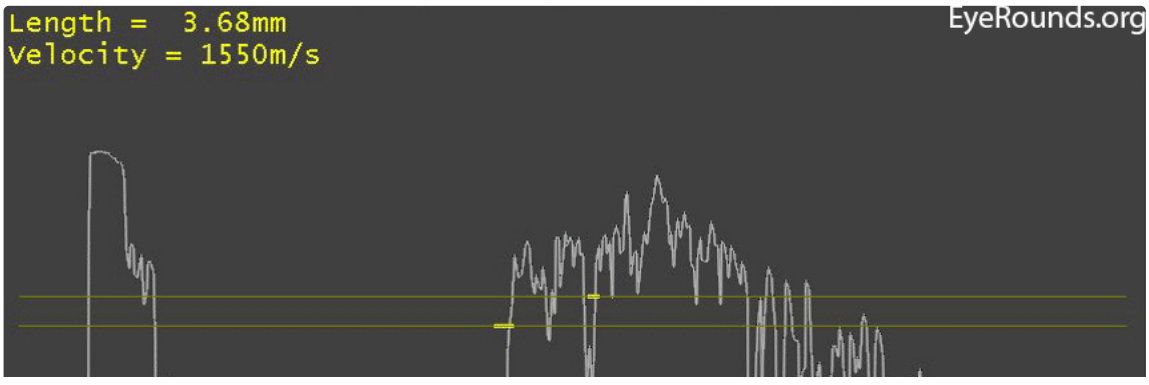

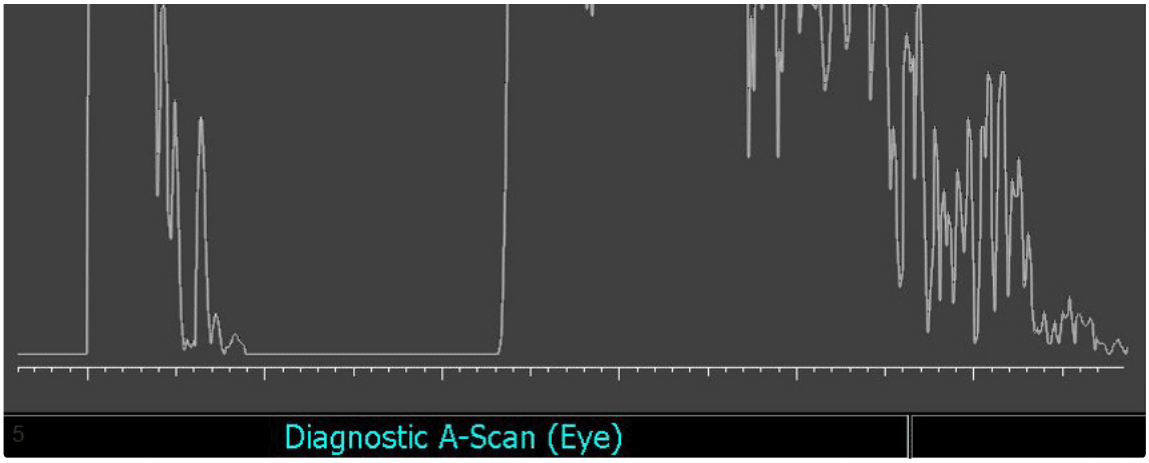

Figure 1e: A-scan ultrasound

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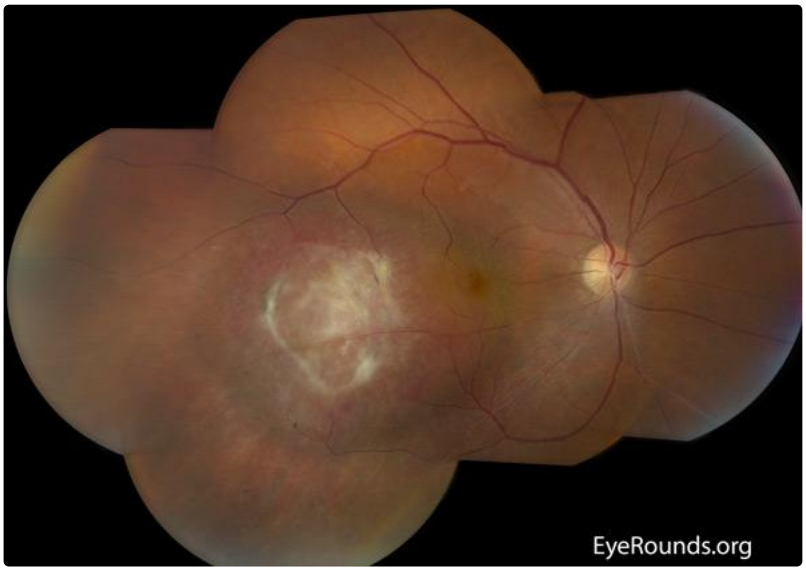

Figure 1f

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Figure 2

Contributor: Eric Chin, MD

These photographs show the appearance of circumscribed choroidal hemangiomas in two different patients (Figures 2a and 2b are one patient, figures 2c and 2d are another).

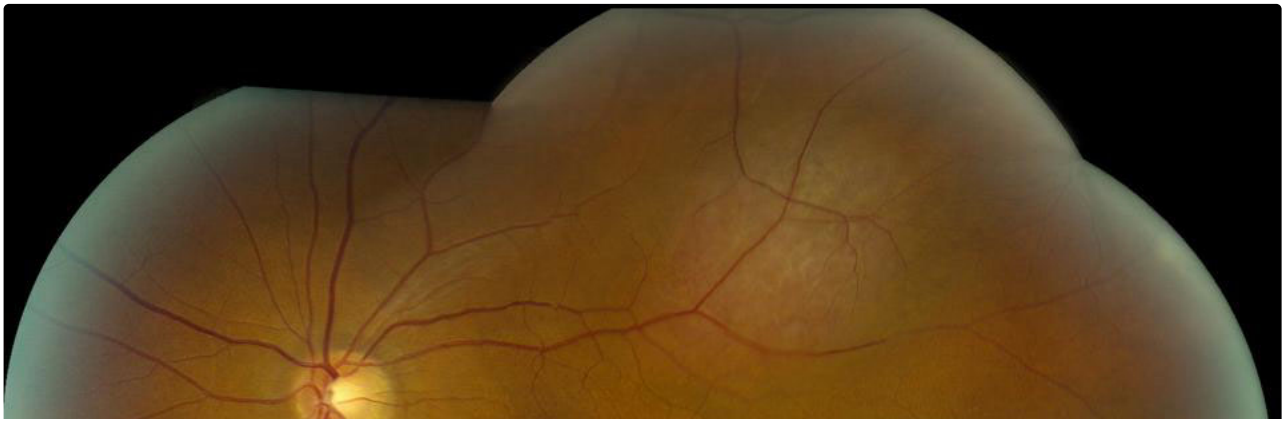

Figure 2a

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Figure 2b

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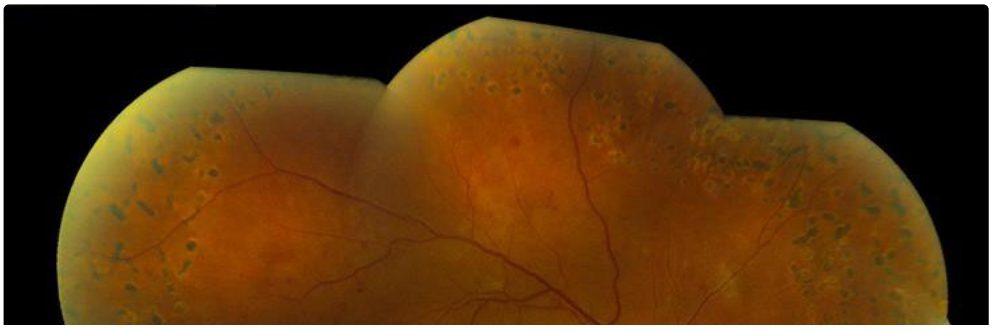

Figure 2c

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Figure 2d

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Figure 3

Contributor: Greg Zablocki, Retina Consultants of Colorado, P.C.

This patient presented with a visually-significant choroidal hemangioma. The patient underwent photodynamic therapy employing the technique of Michels et al. After infusion of 6mg/m2 of verteporfin (Visudyne) intravenously the lesion was illuminated for 163 seconds

technique of Michels et al. After infusion of 6mg/m2 of verteporfin (Visudyne) intravenously the lesion was illuminated for 83 seconds with the activating laser. Two months later vision had improved from 20/70 to 20/30 and the sub-retinal fluid had resolved clinically and on OCT.

Figure 3a

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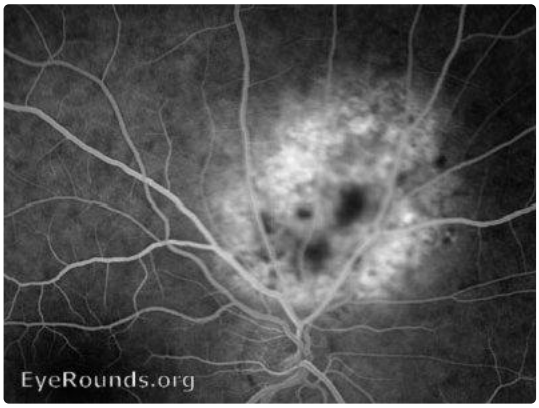

Figure 3b - The fleshy, lobular sub-retinal lesion from Figure 3a shows early phases of flourescein angiograph with hyperflourescence within the lesion (Dye persisted within the lesion 20 minutes after injection)./figcaption>

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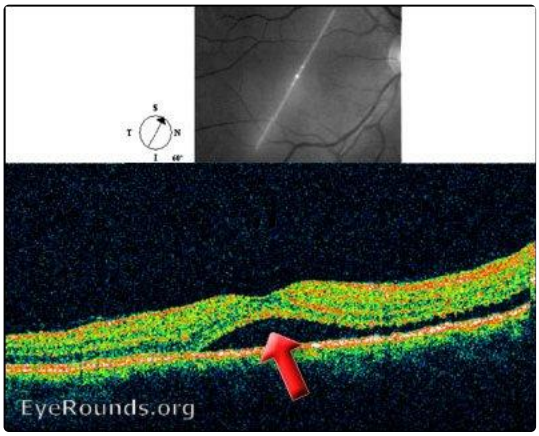

Figure 3c - Optical coherence tomography (OCT) section through the macula demonstrating sub-retinal fluid prior to treatment. Visual acuity 20/70

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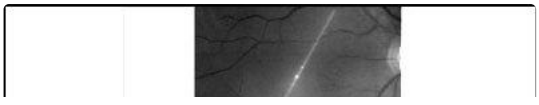

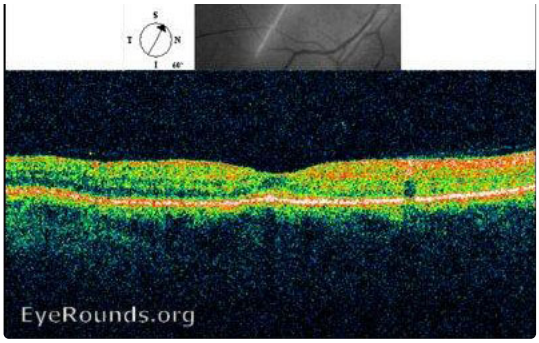

Figure 3d - OCT eight months after treatment showing complete resorption of fluid - visual acuity 20/30.

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Reference:

Verteporfin therapy for choroidal hemangioma: a long-term follow-up, Michels, et al Retina. 2005;25(6):697-703.

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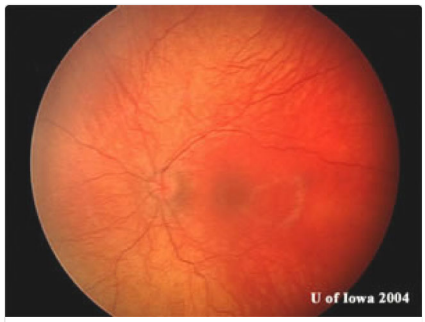

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