Branch Retinal Artery Ischemia

Glenn Yiu, MD, PhD
Associate Professor of Ophthalmology
Introduction

Disclosures

Allergan (C)
Alimera (C)
Carl Zeiss Meditec (C)
Clearside Biomedical (R)
Genentech (R,C)
Iridex (R, C)
Verily (C)

R = research support; C = consultant
Clinical Presentation

79 yo man referred for asymmetric diabetic retinopathy

- Found on routine eye exam; asymptomatic
- Type 2 diabetes mellitus, last A1c 6.8 (5 months ago)
- History of right carotid endarterectomy (2 years ago), last carotid U/S patent (1 mo ago)

- **OD** 20/20 14 mmHg
- **OS** 20/20 18 mmHg
Branch Retinal Artery Ischemia?
<table>
<thead>
<tr>
<th>BRAO</th>
<th>BRVO</th>
<th>BRAI</th>
<th>OIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acute</td>
<td>acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>+/- Hollenhorst plaque</td>
<td>usu. A-V crossing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sectoral</td>
<td>sectoral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>retinal whitening</td>
<td>flame hemorrhages, cotton-wool spots</td>
<td></td>
<td></td>
</tr>
<tr>
<td>no tortuosity</td>
<td>+ venous tortuosity</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Presentation

3 months

BCVA 20/20
BCVA 20/20
Branch Retinal Artery Ischemia (BRAI)

- Hollenhorst plaque
- Sectoral Round Hemorrhages
- No venous dilation or tortuosity

Glenn Yiu (gyiu@ucdavis.edu)