Vision Loss in a Patient with Asteroid Hyalosis
Retina Society Meeting 2020

Rukhsana G. Mirza, MD
Associate Professor of Ophthalmology and Medical Education
Northwestern University, Feinberg School of Medicine
Financial Disclosures

• None
Summary

• This is a case of a 94 yr old woman with dense asteroid hyalosis who presented with progressive vision loss over the course of one day. The diagnosis was made utilizing multimodal imaging leading to timely management.
94 year old female

- Presents with 1 day of painless left vision loss
  - “darkening” of the vision of her left eye that gradually progressed the day before. The following day, she had complete loss of vision other than a small inferior area that prompted her to come to clinic.

- History of exudative AMD OU successfully treated with limited OCT guided injections in the setting of dense asteroid hyalosis OU

- Medical history includes hypertension and osteoporosis
<table>
<thead>
<tr>
<th></th>
<th>OD</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>20/70-2</td>
<td>CF infranasal</td>
</tr>
<tr>
<td>Tonometry</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>EOM</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Confrontational fields</td>
<td>Full</td>
<td>Constriction sparing infranasal</td>
</tr>
<tr>
<td>Pupils</td>
<td></td>
<td>+APD</td>
</tr>
</tbody>
</table>
• As she was dilating, B-scan was available chairside done- no retinal detachment was seen
Two months prior
• Planned to get Fluorescein for definitive diagnosis of CRAO
• Ocular massage performed
• Plans for ED evaluation underway
  • Embolic Etiology
  • GCA
26 seconds. Some flow to the macula, otherwise no arterial flow
37 seconds. Very slow filling of the arteries start
2 min 30 seconds. Slow filling of arteries throughout late frames
Her GCA blood work up was negative.

Her imaging included MRI and MRA of the head and neck which were notable for a subacute punctate posterior medial left superior frontal gyrus infarct, thought to likely be embolic.

She received a transesophageal echo which demonstrated spontaneous echo in the left atrial appendage, a risk factor for thrombosis and subsequent embolus,

- recommended to start apixaban for stroke prevention
4 Days Later
<table>
<thead>
<tr>
<th></th>
<th>OD</th>
<th>OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA</td>
<td>20/60+2</td>
<td>20/50-2</td>
</tr>
<tr>
<td>Tonometry</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>EOM</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Confrontational fields</td>
<td>Full</td>
<td>Essentially full</td>
</tr>
<tr>
<td>Pupils</td>
<td>+APD</td>
<td></td>
</tr>
</tbody>
</table>

“Did you mean to push on my eye at the last visit? That’s when I noticed that I began to see more light”
22 seconds. 14 second push; arteries filling
28 seconds. Full flow seen throughout with 3 sec AV transit time
Summary

• Value of multimodal imaging in the setting of vision loss and asteroid hyalosis

• ED evaluation for CRAO
  • A recent meta-analysis of patients with a CRAO showed a 30% rate of acute cerebral ischemia on MRI imaging within seven days of the diagnosis.
  • current recommendations include emergent evaluation with brain and cardiac imaging to risk stratify and start treatment aimed at secondary prevention of further cerebrovascular accidents after the diagnosis of a CRAO.

• Ocular massage and full recovery of vision in this patient after timely diagnosis

Acknowledgements

• Tim Janetos, MD, MBA
• Olga German MD
References


