Posterior Vitreous Detachment, Retinal Breaks and Lattice Degeneration (Initial and Follow-up Evaluation)

(Ratings: A: Most important, B: Moderately important, C: Relevant but not critical
Strength of Evidence: I: Strong, II: Substantial but lacks some of I, III: consensus of expert opinion in absence of evidence for I & II)

Initial Exam History (Key elements)
- Symptoms of PVD (A:I)
- Family history (A:II)
- Prior eye trauma (A:III)
- Myopia (A:II)
- History of ocular surgery including refractive lens exchange and cataract surgery (A:II)

Initial Physical Exam (Key elements)
- Examination of the vitreous for hemorrhage detachment and pigmented cells (A:III)
- Examination of the peripheral fundus with scleral depression (A:III) The preferred method of evaluating peripheral vitreoretinal pathology is with indirect ophthalmoscopy combined with scleral depression (A:III)

Ancillary Tests
- Perform B-scan ultrasonography if peripheral retina cannot be evaluated. (A:II) If no abnormalities are found, frequent follow-up examinations are recommended. (A:III)

Surgical and Postoperative Care if Patient Receives Treatment:
- Inform patient about the relative risks, benefits and alternatives to surgery (A:III)
- Formulate a postoperative care plan and inform patient of these arrangements (A:III)
- Advise patient to contact ophthalmologist promptly if they have a substantial change in symptoms such as new floaters or visual field loss (A:II)
### Care Management

#### Management Options

<table>
<thead>
<tr>
<th>Type of Lesion</th>
<th>Treatment</th>
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<tbody>
<tr>
<td>Acute symptomatic horseshoe tears</td>
<td>Treat promptly <em>(A:II)</em></td>
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<tr>
<td>Acute symptomatic operculated tears</td>
<td>Treatment may not be necessary <em>(A:III)</em></td>
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<tr>
<td>Traumatic retinal breaks</td>
<td>Usually treated <em>(A:III)</em></td>
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<tr>
<td>Asymptomatic horseshoe tears</td>
<td>Usually can be followed without treatment <em>(A:III)</em></td>
</tr>
<tr>
<td>Asymptomatic operculated tears</td>
<td>Treatment is rarely recommended <em>(A:III)</em></td>
</tr>
<tr>
<td>Asymptomatic atrophic round holes</td>
<td>Treatment is rarely recommended <em>(A:III)</em></td>
</tr>
<tr>
<td>Asymptomatic lattice degeneration without holes</td>
<td>Not treated unless PVD causes a horseshoe tear <em>(A:III)</em></td>
</tr>
<tr>
<td>Asymptomatic lattice degeneration with holes</td>
<td>Usually does not require treatment <em>(A:III)</em></td>
</tr>
<tr>
<td>Asymptomatic dialyses</td>
<td>No consensus on treatment and insufficient evidence to guide management</td>
</tr>
<tr>
<td>Fellow eyes atrophic holes, lattice degeneration, or asymptomatic horseshoe tears</td>
<td>No consensus on treatment and insufficient evidence to guide management</td>
</tr>
</tbody>
</table>

PVD = Posterior vitreous detachment

#### Follow-up History

- Visual symptoms *(A:I)*
- Interval history of eye trauma or intraocular surgery *(A:II)*

#### Follow-up Physical Exam

- Visual acuity *(A:III)*
- Evaluation of the status of the vitreous, with attention to the presence of pigment, hemorrhage, or syneresis *(A:II)*
- Examination of the peripheral fundus with scleral depression *(A:II)*
- B-scan ultrasonography if the media are opaque *(A:II)*
- Patients who present with vitreous hemorrhage sufficient to obscure retinal details and a negative B-scan should be followed periodically. For eyes in which a retinal tear is suspected, a repeat B-scan should be performed within approximately 4 weeks of the initial examination *(A:III)*
Patient Education

- Educate patients at high risk of developing retinal detachment about the symptoms of PVD and retinal detachment and the value of periodic follow-up exams. *(A:II)*
- Instruct all patients at increased risk of retinal detachment to notify their ophthalmologist promptly if they have a substantial change in symptoms such as an increase in floaters, loss of visual field, or decrease in visual acuity. *(A:III)*

*Adapted from the American Academy of Ophthalmology Summary Benchmarks, November 2010 (www.aao.org)*