



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

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

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)