

Clinical Image*Open Access, Volume 3***Flashes and floaters as only sign of underlying retinal tear and vitreous hemorrhage****Wei Chen Lai¹; Timothy Lee^{2*}; Sidney A Schechet^{1,3}**¹University of Maryland School of Medicine, Baltimore, MD, USA.²Uniformed Services University of the Health Sciences School of Medicine, Bethesda, MD, USA.³Elman Retina Group, Baltimore, MD, USA.***Corresponding Author: Timothy Lee**

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Description

A 54-year-old myopic female presented with sudden flashes/floaters in her left eye. Visual acuity was 20/20 and 20/80 in the right and left eye, respectively. Dilated exam of the left eye revealed posterior vitreous detachment (PVD), a retinal tear at 10 o'clock with an actively-bleeding bridging vessel (Figure 1, purple arrow), and a mild vitreous hemorrhage (VH) (Figure A, blue arrows). She was diagnosed with hemorrhagic PVD secondary to an acute retinal tear in the left eye. Laser retinopexy was performed immediately to prevent retinal detachment (RD). On follow-up, the retina remained flat with good laser scarring barricading the tear, successfully preventing RD (Figure 1).

Key symptoms of a PVD are acute onset of flashes and floaters. PVD is a physiologic change due to aging where the vitreous degenerates, liquifies, and separates from the retina [1]. If the vitreous adheres strongly to and aggressively pulls the retina, dramatic increases in flashes and floaters are often first signs of structural retinal damage such as a retinal tear [2].

PVD's naturally occur but portend a 5-10% of associated retinal tears, leading to RD if untreated [3]. In about 7.5% of PVDs, a retinal blood vessel can be torn, causing hemorrhage. A hemorrhagic PVD increases risk of having an underlying retinal tear to nearly 70% and further worsens visual acuity [3,4]. Retinal tears can lead to blinding retinal detachments, so diagnosing and treating a tear promptly is paramount to preserving vision. When a PVD occurs without retinal tear or detachment, close monitoring is recommended, for tears can occur within a few months of PVD occurrence.

Given the serious conditions that could cause flashes/floaters, first-line management in patients presenting with acute flashes/floaters is an urgent ophthalmologic assessment. A complete dilated eye exam within 24 hrs of symptom onset is recommended for ophthalmologists to evaluate, diagnose, and prevent potentially serious blinding conditions.

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Figure 1: Horseshoe retinal tear with an actively bleeding bridging vessel (purple arrow), and a vitreous hemorrhage (blue arrows).

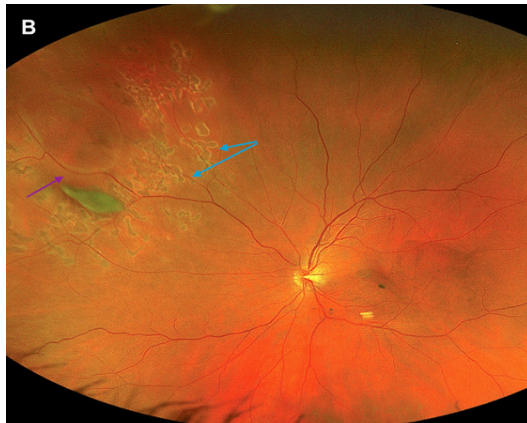


Figure 2: Post-laser retinopexy of the retinal tear without hemorrhage (purple arrow) and appropriate laser scarring barricading the tear (blue arrows).

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