

Posterior Vitreous Detachment

A **Posterior Vitreous Detachment (PVD)** is a common event in the normal aging process of the human eye. The “vitreous humor” is the jelly-like material, which fills the posterior cavity of the eye. The vitreous is 98% water with the remaining portion being fibrous proteins, which give it a stiff consistency similar to double-strength gelatin. The vitreous is apposed and attached to the retina, which is the light sensitive layer in the back of the eye.

As we age, there is a separation of the watery elements from the fibrous components of the vitreous. With this process, the vitreous pulls away from the retina. This is called a **POSTERIOR VITREOUS DETACHMENT**. A PVD occurs most frequently in an aging eye, through injury or with nearsightedness.

Symptoms of a PVD are usually **FLASHES** and **FLOATERS**. A patient sees a “flash of light” in their peripheral vision, which is arc-shaped. This traction and separation of the vitreous from the retina is the cause of **FLASHES**. **FLOATERS** also occur. Floaters are described as “lines”, “dots”, “specks”, “hairs” or “spider webs” seen in one’s vision. Floaters occur because the vitreous is no longer perfectly optically clear. Fibrous elements of the vitreous, small pieces of tissue from the retinal surface or actual hemorrhages may all cause **FLOATERS**. A PVD is only one cause of floaters.

It is imperative that all eyes with recent onset of **FLASHES** and **FLOATERS** be examined quickly and carefully by an ophthalmologist. In most cases, there is no serious underlying problem. Reassurance is given and the eyes are re-examined one month later. The flashes eventually diminish and the floaters fade over time. It is not uncommon for the fellow eye to have a PVD sometime in the future. More importantly, a PVD may cause a **RETINAL TEAR** in roughly 5% of the cases. If left untreated, a retinal tear may lead to a **RETINAL DETACHMENT**. A retinal detachment is a very serious sight-threatening condition requiring a major surgical procedure to repair.

A simple **PVD** by itself requires no treatment. If a retinal tear occurs and is found early, **TREATMENT** is simple and usually very effective. A retinal tear is treated either by “spot welding” several circles of burns around it with a **LASER** or by sealing it with a freezing unit. Both accomplish the same purpose with excellent results and low complication rates. Either treatment is performed as an outpatient procedure.

In conclusion, if flashes or floaters occur, it is important to have the affected eye examined within 24 hours. A retinal tear may be present and may progress to a retinal detachment. If all is normal, the eye is still re-examined one month later. Please contact your ophthalmologist immediately should you experience any symptoms.