

## **Posterior Vitreous Detachment**

A posterior vitreous detachment (PVD) is a rather dramatic event in the normal aging process of the human eye. The vitreous is the jelly-like material that fills the large central cavity of the eye. It is 98% water and 2% proteins, which give the vitreous a stiff consistency similar to double strength gelatin. The vitreous had normal connections to the retina, the light sensitive layer in the back of the eye.

As we age, the watery element in the vitreous separates from the fibrous components. With this comes a contraction of the fibrous elements away from the retina – a POSTERIOR VITREOUS DETACHMENT. This contraction on the retina is responsible for the characteristic “FLASHES” that often accompany PVD’S. The “FLOATERS” frequently reported are from the reorganization of the fibrous elements as well as from some fragments of retina that may have been dragged into the vitreous cavity by this separation. Besides age, other contributing factors include nearsightedness and injuries to the eye. Both may speed up the normal aging process.

All patients who experience a recent onset of flashes and floaters should be examined carefully by their eye doctor. Most of the time nothing unusual is found, and simple reassurance is all that is needed. The flashes eventually go away, and the floaters diminish and become less bothersome.

However, a tear in the retina is found in 5% to 20% of eyes with a PVD. If left untreated, these tears may lead to a retinal detachment, a very serious sight threatening condition requiring a major surgical procedure to repair. Even in the best hands, the results of this procedure can be unpredictable.

When symptoms appear it is important to examine the eye within a day of their onset. Changes can occur rapidly, and time can be of the essence if a retinal detachment is present. Even if all is normal in the first eye, patients cannot assume that all will be well with the second eye. It also should be carefully examined and treated if necessary.

If retinal tears are found, TREATMENT is simple and very effective. They should be sealed to prevent a retinal detachment. This is done by either spot welding several circles of burns around the tear with LASER or by sealing it with a freezing unit. Both accomplish the same purpose with good results and low complication rates. The procedure is done in an outpatient setting under a local anesthetic.