POSTERIOR VITREOUS DETACHMENT- “PVD”

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 which fills the large central cavity of the eye. It is 98% water with the remaining portion being fibrous proteins. It has a stiff consistency similar to gelatin. The vitreous has normal connections 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. With this comes a contraction of the fibrous elements away from the retina. This is called a posterior vitreous detachment (PVD). This traction on the retina is responsible for the characteristic "flashes" which often accompany PVD's. The "floaters" frequently reported are from the reorganization of the fibrous elements as well as from some fragments of retina which may have been dragged into the vitreous cavity by this separation. It is important to note that many young adults have floaters; however, PVD is most common in those over 40. Besides age, other contributing factors include nearsightedness and injuries to the eye.

It is important that all eyes with recent onset of flashes and floaters be examined carefully by an eye doctor utilizing dilating drops. You may have seen some instruments advertised recently that claim you do not require dilating eye drops. The dynamic examination of the fluid/nerve interface can only be performed by a skilled examiner with dilating drops, while many instruments may not detect subtle changes. While the dilating drops may be inconvenient for some patients, we believe it gives us the most information and accuracy. 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 with time.

However, between 5 and 20% of eyes with a PVD will suffer a torn retina. If left untreated these tears may lead to a retinal detachment. A retinal detachment is a sight threatening condition requiring a surgical procedure to repair. Even in the best of hands, the results of this procedure can be very unpredictable. In the event nothing unusual is found, the eyes should be checked again in thirty to ninety days. This is the period of highest risk following symptoms in which a retinal tear or detachment might occur.

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.