Posterior Vitreous Detachment (PVD) and Retinal Tears

The space between your eye lens and your retina is filled with a clear, gel-like fluid called the vitreous. The vitreous is attached to your retina. As you age, the vitreous thins and may separate from the back of your eye. This is known as posterior vitreous detachment (PVD). PVD is usually harmless and causes floaters or flashes in the eye. PVD is very common and its incidence increases greatly with advancing age.

In some cases, the tugging on the retina by the detached vitreous may cause the retina to tear. A tear in the retina can allow fluids to seep underneath the retina, causing the retina's sensory and pigment layers to separate and detach. This condition can cause great damage to your vision if it is not treated.

A retinal detachment or retinal tear is considered an emergency and requires immediate medical attention.

There are three types of retinal detachments...

- The most common type occurs when there is a break in the sensory layer of the retina, and fluid seeps underneath, causing the layers of the retina to separate.
- The second most common type occurs when the vitreous or scar tissue creates traction on the retina and pulls it loose.
- The third type is less common and happens when fluid collects underneath the layers of the retina and separates it from the back wall of the eye.

Symptoms

The symptoms most often associated with retinal detachment include...

- Flashes of light
- Vision that appears wavy or watery
- Vision obstructed as if by a veil or curtain
- Spots, called floaters, that look like bugs or spider webs and move as your eye moves
- Sudden change in your peripheral (side) vision
- Sudden decrease of vision

If you experience any of these symptoms, call us immediately for an appointment. Early diagnosis is critical in treating retinal detachment and tears. Early treatment greatly improves the chance of restoring your vision.
Being aware of the quality of your vision is extremely important, especially if you're in a high risk group for PVD. Compare your vision every day with what it was the day before. Also compare the vision in one eye with the vision in the other. You can do this by covering each eye in turn and noting your visual acuity.

**Causes**

PVD most often occurs in middle-aged and senior-aged persons, but may happen to younger people who have had an eye injury or eye surgery.

Nearsighted people are susceptible to PVD and to tears because their retinas are thinner and more fragile due to the size and shape of their eyes.

**Treatment**

We use examination of the retina with an ophthalmoscope, ultrasound and specialized imaging devices, such as OCT, to diagnose PVD and other retina tears.

When a retinal detachment is found, our first concern is determining whether the macula is attached. The macula is the center of the retina and responsible for detailed vision. The status of the macula determines the type of corrective surgery required for detachment repair. It also is an indication of how much of vision the operation will restore.

The type, severity, location and length of time of the detachment determine the appropriate treatment. There are several procedures that may be considered. These include vitrectomy, pneumatic retinopexy, laser, scleral buckle and silicone oil infusion.