A posterior vitreous detachment (PVD) is a common condition that occurs when the vitreous (the jelly-like substance filling the eye) shrinks as a part of the normal aging process (usually in the mid 50s) and separates from the retina (the photosensitive tissue lining the back of the eye).

During a posterior vitreous detachment very small fibers within the vitreous pull on the retina, causing spontaneous flashes of light in some patients. In most cases, the vitreous separates from the retina without any problems; however, in a small percentage of people, a posterior vitreous detachment can lead to a retinal tear or retinal detachment.

A posterior vitreous detachment can occur in younger people if they are nearsighted (myopic) or if there was trauma to the eye from a decelerating injury (whip-lash). Since the vitreous usually has a stronger adhesion to the retina in younger patients, there is a greater risk of a retinal tear or retinal detachment.
Who does it affect and what are the risk factors?
Posterior vitreous detachments occur as a normal part of the aging process and are very common in older people. Studies have shown that posterior vitreous detachments occur in around 53% of people over 50 years old and 67% of people over 65 years old. Posterior vitreous detachments can also occur in people under 50, though this happens less often (around 6%). The following risk factors increase the risk of developing a posterior vitreous detachment:

1. Age
2. Myopia (nearsightedness)
3. Trauma from decelerating injuries
4. Inflammation in the eye

What are the symptoms of a posterior vitreous detachment (PVD)?
In some cases, patients do not experience any symptoms. Most patients, however, experience one or more of the following symptoms:

1. Floaters in the shape of dots or cobwebs
2. Flashes of light

How can the doctor determine the extent of my posterior vitreous detachment (PVD)?
The doctor will perform a dilated exam using a slit lamp to determine the extent of the posterior vitreous detachment and its effect on the macula. To check the outer retina, the doctor will use an indirect ophthalmoscope. To precisely document the posterior vitreous detachment and how it changes over time, pictures of your eye will be taken.

Optical Coherence Tomography (OCT) is a high definition image of the retina taken by a scanning ophthalmoscope with a resolution of 5 microns. These scans can image the posterior vitreous detachment and the doctor will use OCT images to objectively document the progress of the disease throughout the course of your treatment.

What are the possible complications of a posterior vitreous detachment (PVD)?
As most of vitreous pulls away from the retina, some fibers can get stuck to the retina. As these stuck fibers pull on the retina, a retinal tear or detachment can develop. Myopic (nearsighted) patients are at a much higher risk of developing a retinal tear or retinal detachment than non-myopic patients because they have thin retinas. If you experience any of the following symptoms, please call us immediately:

1. Black curtain coming across your vision
2. Sudden onset of numerous flashes
3. Sudden onset of a floaters that look like sand
4. Sudden blind spot in your side vision

How long does it take for the vitreous to separate from the retina and what can I do to prevent complications?
Once the vitreous begins to separate from the retina, it can take a month or more to separate completely in most people. While the vitreous is separating from the retina, it is important that you refrain from any strenuous activity (i.e. jogging, weight lifting, yoga or martial arts) or traumatic or decelerating movements of the head (i.e. boxing, roller coasters). The doctor will monitor the progress of your posterior vitreous detachment and inform you when you may resume normal activities.

What are the treatment options?
There is no way to treat a posterior vitreous detachment and observation is the best course of action. If a retinal tear or retinal detachment does occur, several treatment options are available. A retinal tear can be treated with barrier laser treatment or cryoretinopexy. Both of these procedures can be done in our office. A retinal detachment requires surgical intervention and depending on the extent and location of the retinal detachment, several different techniques are used. It is important to monitor your vision throughout the course of the posterior vitreous detachment and call us immediately if you experience any sudden increases in flashes and/or floaters.