

## **POSTERIOR VITREOUS DETACHMENT**

Posterior vitreous detachment (PVD) is a rather dramatic event in the normal ageing process of the human eye.

The large central cavity of the eye is filled with jelly-like material. This is called the ‘vitreous.’ This jelly is 98% water and 2% proteins, which give it a stiff consistency like gelatine. The vitreous has normal connections to the retina, the light sensitive layer in the back of the eye. As we age, the watery elements in the vitreous separate from the fibrous/protein components. At the same time the fibrous components contract away from the retina, pulling the jelly free of the retina, leaving clear fluid behind – a ‘posterior vitreous detachment.’

The ‘floater’ frequently reported at this time is from the reorganisation of the fibrous elements, as well as occasionally some fragments from the retina that have been dragged into the line of sight in the vitreous cavity. Sometimes patients notice ‘flashes’ of light in the eye, particularly in the dark when they move the eye. This is due to the partially separated jelly tugging on the retina where it remains attached in one or two places.

Besides age other factors may contribute to a PVD, particularly nearsightedness and occasionally injuries to the eye. All patients who experience the sudden onset of flashing lights in the eye and the appearance of floaters, particularly multiple fine floaters, should be examined carefully by an ophthalmologist. 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, in up to 10% of eyes a tear in the retina may be found. This can often be sealed by outpatient laser treatment, if left untreated a retinal tear may lead to a retinal detachment – a very serious sight threatening condition requiring major surgical intervention for repair. Even in the best of hands the results of retinal detachment repair can be unpredictable.

Hence, when the symptoms of flashes and floaters appear it is important to have the eye examined as soon as possible as changes can progress rapidly. If a retinal detachment begins to occur a patient will notice a dark curtain or veil beginning to come across their vision from the periphery when they cover their unaffected eye. Should this occur they must be seen urgently. Hence the symptoms in patients who do suffer a retinal detachment are usually the sudden appearance of multiple floaters associated with flashing lights, followed by a progressive field defect in that eye. This is considered an ocular emergency and assistance should be sought urgently.