

FLASHES AND FLOATERS (POSTERIOR VITREOUS DETACHMENT)

The vitreous is a clear gel-like substance that fills the back of the eye (behind the lens). When you are young, the gel is clear and uniform throughout. With increasing age, the vitreous gel becomes more liquid, with/without some more dense parts that form clumps or strands. Over time this process results in the shrinkage of the gel, with collapse and separation of the gel from the retina (the nerve layer lining the back of the eye). This separation of the vitreous gel from the retina is called a posterior vitreous detachment. These processes cause an increase in floaters in the eye. Floaters are small, moving specks that cause shadows in one's visual field. Very short, bright flashes of light can also appear in one's peripheral vision.

Floaters and flashes of light in your vision are common, and are usually not serious. It is however important to have a thorough examination of your retina in order to assess that there has been no damage to your retina during the posterior vitreous detachment.

The following symptoms are reasons to be more concerned:

- The sudden development of a single, large floater
- A sudden "shower" of small floaters or increase in floaters
- Bright flashes of light in your peripheral vision – especially if these persist
- You become aware of a shadow/darker area in your vision – usually peripherally at the start
- Your vision is blurred/impaired
- Floaters that develop after eye injury or eye surgery

Should you have any of these symptoms it could be a sign of a more serious and vision-threatening problem, and you are therefore advised to see an ophthalmologist urgently.

What causes flashes and floaters?

Floaters

These are usually caused by clumps of mobile gel or the component proteins/fibres of the degenerating vitreous gel. You will experience them as mobile small dark spots, squiggly hair-like lines, rings or spider webs. Floaters almost always get better or less bothersome over time, and your brain also gets better at noticing them less. They are usually only problematic if there are many of them and/or they are prominent and central, whereby they cause some persistent visual disturbance and may interfere with reading or driving.

Flashes

Flashes of light are the result of physical force on the retina, most often pulling or bumping on the retina. These can occur when the vitreous gel collapses and separates/pulls away from the retina (posterior vitreous detachment). In some cases, the gel pulls hard enough on the retina to cause a small tear in the retina. Retinal tears often lead to a retinal detachment, which is serious and can lead to permanent visual loss if not treated.

How are flashes and floaters diagnosed?

Your ophthalmologist will be able to diagnose and evaluate the cause of your floaters and/or flashes. They will perform a thorough eye examination, usually with pupillary dilatation to allow the specialist to assess your vitreous gel and the peripheral retina to look for holes/tears.

Your ophthalmologist is unfortunately not able to predict whether these floaters will get better or worse with time. Floaters may be difficult to detect by ophthalmological examination, and your doctor may therefore not be able to see them as well as you do.

How are flashes and floaters treated?

Floaters very seldom require any treatment, as most improve over time. In very rare cases, a surgical procedure to remove the gel from the eye (vitrectomy) may be done. This procedure is reserved for cases where the floater causes significant and persistent visual impairment.

Flashes should settle after days to weeks, especially if no retinal hole/tear is identified by the ophthalmologist. If a retinal hole/tear is found, retinal laser can be performed around the hole/tear to prevent the development of a retinal detachment. The laser causes scarring and therefore adhesion, thereby “sticking” the retinal down against the outer layer of the eye.