

# Flashes and Floaters

**Floaters** are shapes which people can see drifting across their vision. There may appear as small specks or irregularly shaped strands that look like “insects”, “cobwebs” or “commas”.

They are actually physical particles which cast shadows on the **retina**. They are more visible against a clear background such as a white wall or the clear blue sky. They move quickly with eye movement and drift away slowly when the eye movement stops.

They are due to particles in the clear jelly-like substance called the **vitreous** which fills most of the inside of the eye. They can be annoying at times but most are barely visible and are usually harmless.

However the sudden appearance of floaters, especially accompanied by **flashes of light**, can be a symptom of more serious eye conditions.

The **vitreous** is usually clear, but may contain tiny remnants of tissue in its substance, fibres left over from blood vessels during the eye’s development. These are “**normal**” **vitreous matrix floaters** and are completely harmless.

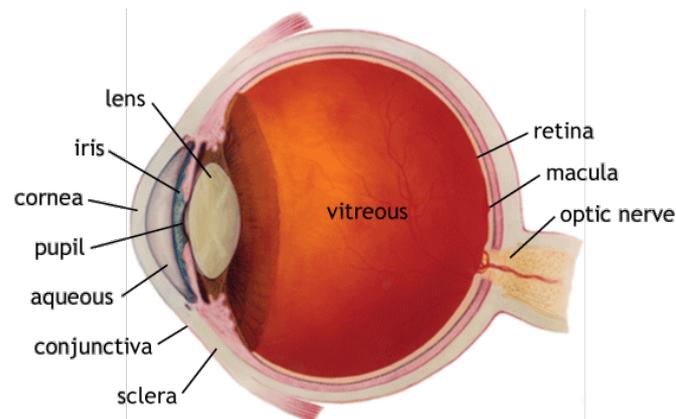
The vitreous gel tends to liquify and shrink as a normal part of the ageing process and slowly separates away from the **retina** on the inside surface of the eye.

Movement of the vitreous can tug on the retina, causing the eye to see momentary **flashes** of bright white light. A sudden “shower” of floaters or a single large round or spider-like floater often appears at the same time. This is called a **posterior vitreous face detachment**.

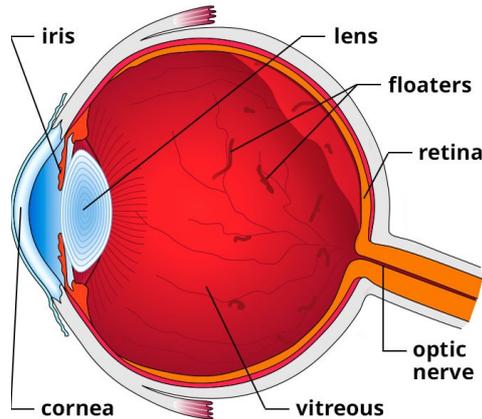
The flashes are mainly seen at night or in dim light, mainly in the peripheral vision and can occur on and off for days, weeks or months.

Usually the flashes disappear with time and the floaters become less and less noticeable as your brain adjusts to the changes in the vitreous and tends to ignore the floaters.

**The Human Eye**



## Posterior Vitreous Detachment and floaters



## What floaters look like



**Posterior vitreous detachment** is a common phenomenon, especially in people over the age of 55 but can occur at an earlier age in people who are **short-sighted**

## Are flashes and floaters serious?

Generally, in the vast majority of cases, the vitreous strips away from the retina cleanly without doing any harm at all, but very occasionally it can tear the retina producing a small retinal hole. Fluid can seep through this hole and cause the retina to detach. A **retinal detachment** can of course can be a serious problem.

The sudden onset flashes and floaters should therefore be assessed by an ophthalmologist (specialist eye doctor) to determine whether a retinal tear has occurred.

## Retinal Tears and Retinal Detachment

If the retina is torn by the vitreous pulling on it, fluid can seep through the hole or tear formed in the retina causing a **retinal detachment**.

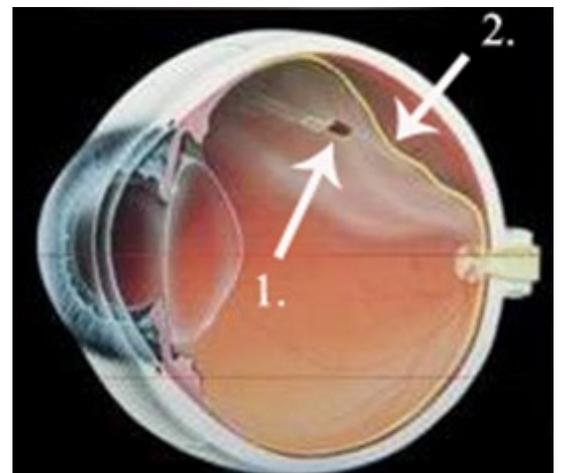
If the flashes become more frequent or more intense, or if you see the onset of dark shadow or curtain coming over your vision or if you suddenly lose your vision, you should see your eye specialist or go to an Eye Emergency Department without delay.

## What can be done?

If there is no retinal tear, nothing needs to be done.

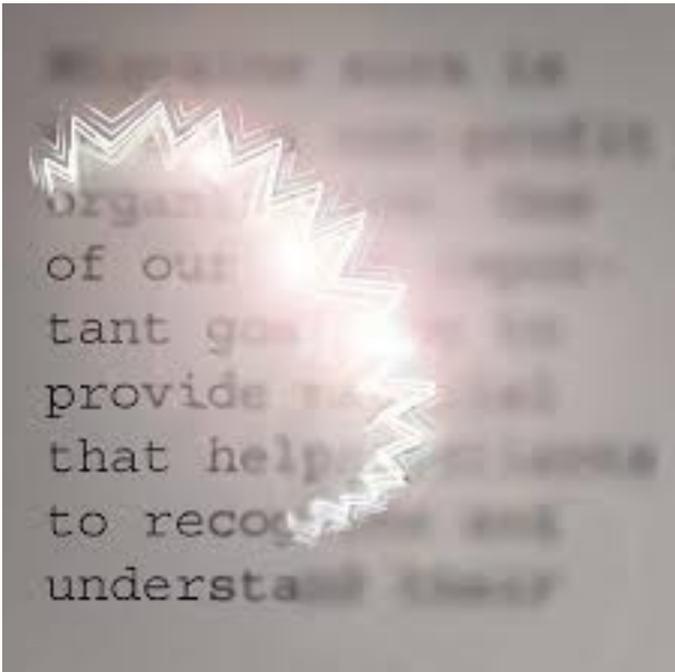
If a retinal tear is found, it can usually be sealed by laser treatment or sometimes by cryotherapy (freezing treatment).

In both cases scarring is produced around the tear or hole which seals it. If the retina has detached, it will have to be repaired surgically, usually by a specialist vitreo-retinal surgeon.



## Can floaters be removed?

It is technically possible to remove floaters by an operation known as a **vitrectomy**. In the vast majority of cases this is unnecessary as the procedure carries risks of serious complications such as retinal detachment and the accelerated formation of cataracts. Therefore most surgeons do not recommend this routinely unless the floaters are significantly affecting the vision.



## Other causes of flashing lights.

A jagged or zigzag pattern of flashing lights, usually in an expanding pattern, often affecting both eyes and typically lasting 5-20 minutes, is likely to be **ocular migraine**. The visual disturbance is caused by spasm of the blood vessels in the brain.

A classical **migraine headache** may or **may not** follow these symptoms. The first occurrence of any flashing lights still warrants a visit to your doctor who may refer you to an ophthalmologist.