

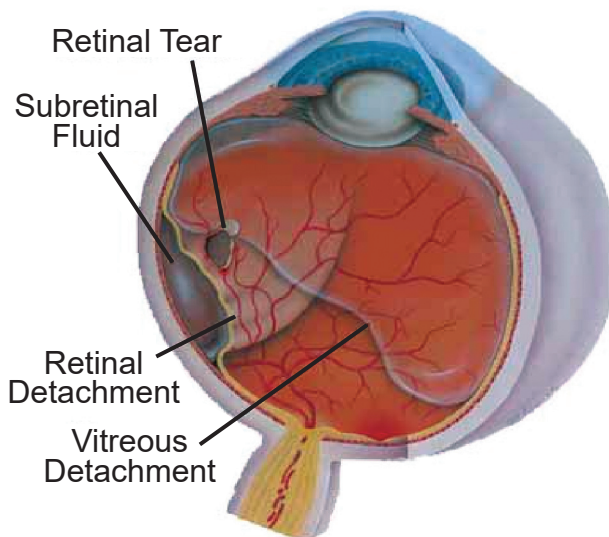
Treatment of retinal tears

If a tear of the retina has occurred, laser treatment or cryotherapy may be used to seal the tear, so that a retinal detachment doesn't occur.

Laser treatment (photocoagulation) - A tiny laser beam is directed through your pupil using special lenses, and creates multiple "spot welds" around the retinal tear to seal it.

Cryotherapy (freezing treatment) - A small probe is applied to the outside of the eye overlying the tear and freezes through to the tear, creating a scar that seals the hole.

Both treatments are usually performed under local anaesthesia and can be associated with a little discomfort. The eye may be red and a little sore for a few days after cryotherapy.



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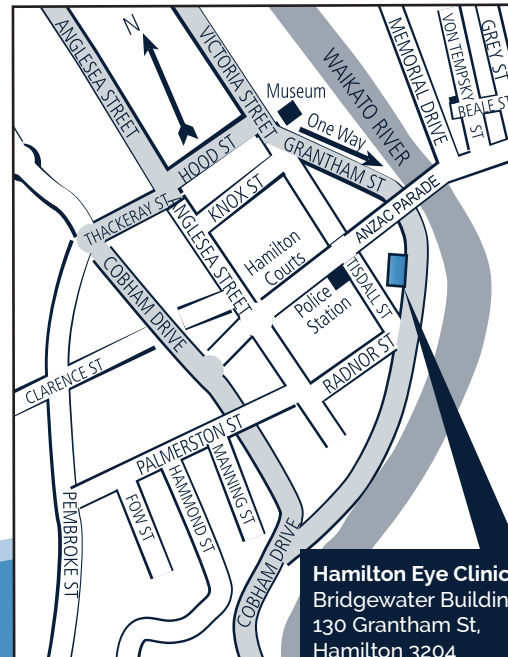
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HAMILTON EYE CLINIC

A guide to Floaters, Flashes and Retinal Detachment

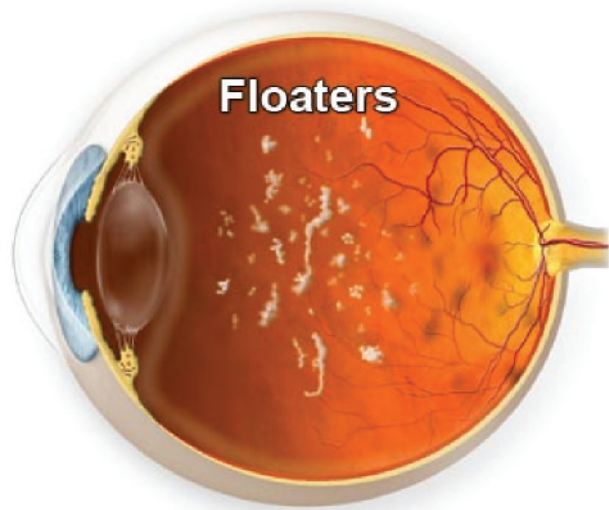


Waikato's Specialist Eye Centre
and Eye Surgery Facility

A Guide to Floaters, Flashes and Retinal Detachment

The vitreous is the gel that fills the eye. Lining the inside wall of the eye behind the vitreous, is a light sensitive layer called the retina. As we age, the vitreous becomes more fluid-like in some areas, causing clumping of the gel which we occasionally see as floaters in our vision. As the vitreous liquefies further, it separates from the back of the eye and leads to what is called a posterior vitreous detachment, often causing floaters and flashing lights.

A posterior vitreous detachment is not in itself a concern, but sometimes leads to a retinal tear or a retinal detachment, both of which are much more serious. For this reason, the sudden onset of many new floaters or flashes must not be taken lightly, and you should seek advice from an eye care specialist promptly.



Floaters appear as spots or curly lines in our vision and are usually more obvious against a clear background such as a blue sky or a white wall. They move as your eye moves, but tend to drift away when eye movement stops. Floaters are usually harmless and although initially annoying, tend to become less noticeable with time.

Flashing lights may be seen either alone or with floaters, and are usually caused by the vitreous gel tugging on the retina during a posterior vitreous detachment. These flashes typically last for a fraction of a second and appear in our side vision, usually at night time or in conditions of dim lighting.

Retinal detachment: Sometimes the vitreous gel can be adherent to the retina, so that when a posterior vitreous detachment occurs, the retina is torn. This can cause flashes and slight bleeding, which you see as a shower of floaters, and can also allow fluid from the vitreous to pass through the tear, lifting the retina up and away from the wall of the eye. This is called a retinal detachment and is a serious threat to your sight. If you develop a retinal detachment you will usually see a dark shadow, which starts off at the edge of your vision and steadily enlarges with time. Prompt surgery is needed to reattach the retina to prevent permanent blindness.

Treatment of retinal detachment

When part of the retina has detached, vision will be lost unless reattachment surgery is performed. Fortunately almost all retinal detachments can be repaired, although sometimes more than one operation is required.

Reattaching the retina usually takes away the shadow in the vision caused by the retinal detachment.

If, however, the shadow extended into the centre of the vision, a degree of permanent damage may have occurred and it is unlikely that your reading vision will be fully restored, even when surgery to reattach the retina is successful.

Types of surgery to repair retinal detachment:

1. Pneumatic Retinopexy

Cryotherapy (freezing) or laser treatment is applied to the retinal tear. A gas bubble is injected into the vitreous gel to push the detached retina against the back of the eye and allow the tear to seal. You are asked to maintain your head in a certain position for several days. The gas bubble may take several weeks to disappear, during which time it is unsafe to fly in an aeroplane.

2. Vitrectomy

Tiny incisions are made in the wall of the eye and fine instruments positioned inside the eye to remove the vitreous gel and replace it with a gas bubble. Laser or cryotherapy is applied to the retinal tear to seal it, and positioning of the head for several days is required. Over time the gas is absorbed and replaced by the eye's own clear fluid, but while you have a gas bubble in the eye, it is unsafe to fly.

3. Scleral buckling

A cryotherapy probe is initially used to seal the retinal tear from the outside of the eye. A strip of silicone or plastic called a "buckle" is then sewn onto the white outside wall of the eye over the site of the retinal tear. This pushes the wall of the eye in closer to the underlying retinal tear and encourages the retina to reattach. The buckle is left on the eye permanently, but is hidden away under the tissues behind the eyelids.

Your surgeon will discuss with you which is the most appropriate operation for your eye.