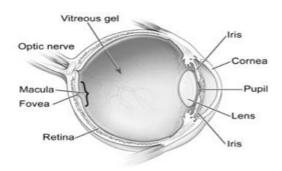


Understanding Retinal Detachment

Patient Information Leaflet

What is the Retina?

The retina is a very thin light sensitive tissue layer that lines the inside of the back of the eye. It transmits messages to the brain, which are interpreted as sight. It is made up of a number of layers. Retinal detachment develops in approximately 1 in 10,000 people per year.



The diagram illustrates that the retina is situated at the back of the eye. This results in the need to have the pupil dilated in order for the doctor to view the retina. The macula is a very important part of the retina. It is responsible for clear central vision, which is necessary for reading, driving, watching television, etc. If the macula has detached, it can have very serious implications regarding the visual prognosis.

What is a retinal detachment?

A retinal detachment develops when a separation occurs between the retina and the outer layers of the eye.

The part of the retina that has separated will not work properly. Hence the picture that the brain receives becomes patchy or may be lost completely.

What are the symptoms of a retinal detachment?

The eye is full of a jelly-like substance called the vitreous. With age, the vitreous gel liquefies and can pull away from the retina causing irritating but usually harmless floaters.

However, flashing lights and a shower of floaters may mark the onset of a retinal detachment. Flashing lights can occur as the vitreous gel pulls on the retina, which may initiate a retinal detachment. Floaters are often described as being black spots or threads, which appear to move within the eye. Some people may liken it to seeing a cobweb or a net curtain-effect in front of their eye. A shadow or curtain of missing vision may also be experienced.

What causes a Retinal detachment?

Most retinal detachments occur spontaneously in shortsighted (myopic) people as a result of structural differences within these people's eyes compared to "normal" sighted eyes. The natural changes that occur

to the vitreous gel within the eye as we age can also lead to a tear or hole forming in the retina, leading to a retinal detachment in older people. Other causes of retinal detachment can include trauma, bleeding within the eye, associated eye diseases such as diabetes or certain inherited retinal disorders.

Management

If a retinal hole or tear is detected before any detachment occurs, it may only be necessary to have laser or freezing (cryotherapy) treatment to prevent the retina from detaching.

This is normally done under local anaesthetic and it may be possible to treat this in the clinic.

If the retina has detached, it may require one of the following operations as well as laser or Cryotherapy.

Scleral Buckle

Pressure can be applied around the outside of the eyeball. Fine bands made of silicone, plastic or sponge are stitched around the outside of the eye so that they push in against the retina in an effort to apply pressure and reunite the retina to the outer layers of the eye. These are left in place and usually do not cause any problems.

Vitrectomy

The retina can also be reattached from the inside of the eye. This operation involves removing the vitreous gel and replacing it with a clear substance (air, gas or silicone oil). These substances support the retina, thereby encouraging reattachment. This closes off the break in the retina from the inside.

Posturing

To ensure that the air, gas or silicone oil continues to support the retina during the healing process, posturing is often necessary after the operation. This involves positioning your head in a certain way depending on where the detachment is situated. For example "left cheek to pillow". The surgery is the first step in reattaching the retina; posturing is the second step. It may be necessary for up to 10-14 days after surgery to allow the retina to reseal to the outer layers of the eye. Posturing must be carried out 24 hours a day in order to ensure the best possible outcome. A 10 minute break per hour is allowed. Whilst tedious, the importance of posturing cannot be over-emphasised.

What to expect

It is not unusual to feel quite tired for a couple of weeks after the general anaesthetic or for the eye to feel uncomfortable for a few days.

Following surgery, the eye will have an eye pad over it until the next morning. Once removed, the eye may appear red and swollen. This will gradually resolve. The vision will be blurred, and can often be even worse than before surgery if a vitrectomy was performed and gas was inserted into the eye to support the retina. Postoperative drops will be prescribed and the eye will be cleaned regularly.

Often you may experience the sensation of a bubble in your eye. This is as a result of the air or gas inserted and will disappear as it absorbs (this usually takes 2-5 weeks depending on the substance used). Silicone oil remains in the eye until it is removed with another operation.

Drops will be prescribed for a number of weeks until the eye is "quiet" (uninflamed) and has settled down. The drops commonly used include an antibiotic, an anti-inflammatory and a dilating drop. The dilating drop will result in blurred vision, as it keeps the pupil dilated allowing the eye to rest.

Discharge normally occurs 1-7 days after surgery, sometimes longer depending on progress. Initially contact sports and any vigorous physical activity or heavy lifting should be avoided.

You may return to work and driving as instructed by your Ophthalmologist.

You should not travel by air if gas is still present in your eye, as it will expand, causing very serious consequences. Your Ophthalmologist will be able to advise you.

How much vision can be expected after surgery?

Retinal surgery is very complex. Positive outcomes depend on a number of issues, such as how much retina has detached, for how long, if the macula has detached or not, and patient's compliance with posturing, to name but a few.

The aim of managing retinal detachment is to recover or preserve as much vision as possible.

Some people do not have good vision following surgery due to associated bleeding or because the macula has been detached prior to surgery.

In the majority (70-80%) of cases the retina can be repositioned with one operation, but further surgery is not uncommon, as no two retinal detachments are alike and every individual heals differently.

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Recovery of sight is a gradual process that may takes several months with successful surgery. It is impossible to predict how much vision each individual will recover. Occasionally the retina can be successfully reattached, but the vision does not recover at all.

We hope that this information is helpful to you. If anything is unclear, or you have any other questions you would like to ask, then please ask the nurse/doctor before the procedure.

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Revision History

Ref No.	Version No.	Date Approved	Change	Section No.	Approved by
-	1	2001	New Information Leaflet	-	
PIL008	2	April 2014	Revised Information Leaflet	All	Hospital Management Group