Retinal detachment surgery

We’ve given you this factsheet to explain what happens in a retinal detachment operation. It is important that you understand this information before you sign the consent form and agree to go ahead with the operation.

What is retinal detachment?

The retina is the light sensitive film at the back of the eye. Retinal detachment is a condition where the retina peels away from the innerwall of the eye. In most cases the retina detaches because a hole or a tear has formed in the retina allowing fluid to pass underneath the retina. Most retinal detachments occur as a natural ageing process in the eye.

You may be more likely to have retinal detachment if you are short-sighted, have had cataract surgery in the past or have suffered a severe direct blow to the eye. Some types of retinal detachment can run in families but these are rare.

Treating retinal detachment

We can treat retinal detachment with an operation to seal the holes in the retina and reattach it to the back of the eye.

For the operation you will have either a local anaesthetic or a general anaesthetic. A local anaesthetic is an injection which only numbs the area that we are treating. If you are having a local anaesthetic you will be awake during the operation but you should not feel any discomfort because your eye will be numb. Your other eye will be covered, so you won’t be able to see what is happening. If you are having a general anaesthetic, you will be fully asleep throughout the operation. Your surgeon will discuss the most suitable type of anaesthesia with you before the operation, but most patients are treated under local anaesthetic.
There are two different methods we can use in a retinal detachment operation: vitrectomy or scleral buckle.

• **Vitrectomy**
  
  The retinal tear may have been caused by the vitreous gel (jelly inside the eye) pulling on the blood vessels. In a vitrectomy operation we remove this gel from the eye. To seal the tear, the surgeon uses either laser or a freezing probe to make a scar around the tear. A gas or silicone oil bubble is then inserted into the eye to support the retina whilst it heals. If we use a gas bubble it will slowly absorb over two to eight weeks. If we use a silicone oil bubble, we will need to do a small operation to remove it at a later date. While the gas or oil bubble is in your eye, your vision will be very blurred. To make sure the gas or oil bubble works as well as it can, your surgeon may ask you to use a technique called ‘posturing’ (see below).

• **Scleral buckle**
  
  We can help seal any holes in the retina by stitching a piece of silicone rubber or sponge to the outside of the eye. This acts as a ‘splint’, pushing the outer wall of the eye up to the retinal hole. The buckle will not be visible on the outside of the eye. We will usually leave it in place permanently.

### After the operation

#### Posturing

To help the gas or oil bubble to support the retina, we may ask you to use a technique called ‘posturing’. This involves placing your head in a specific position so that the gas or oil bubble will lie against the part of the retina that needs support.

You will need to hold your head in the posturing position for 45 minutes of every hour during the day, for five days after the operation. This can be a challenge but it is just as important as the operation itself. During the 15 minutes per hour that you are not in the posturing position, try moving around or taking gentle exercise to relieve any stiffness or aches.

#### Side effects

Normal side effects after a retinal detachment operation include:

- discomfort in the eye (this can usually be treated with simple painkillers such as paracetamol or ibuprofen)
- redness in the eye
- swollen eyelid
- watery eye
- a gritty sensation (as any stitches dissolve)
- very blurred vision

These side effects should gradually improve.

Your eyesight may be different after the procedure. Your surgeon will explain the kind of results you can expect, but it may be a few weeks or months before we can tell whether your vision has improved. You may also need to have new glasses.

#### Eye drops

We will give you some eye drops after the operation to reduce inflammation (steroid drops), another to prevent infection (antibiotic drops), and other drops and tablets to keep your eye pressure within normal limits. We will explain how often to use the drops before you leave hospital.

We will invite you back in for a check-up appointment and let you know when to stop using the drops.

#### Daily activities

You can bathe or shower after the operation, but avoid splashing water near your eye. As long as you feel comfortable, you can carry on with your usual activities. Most people choose not to drive over the first few weeks.
Patient information factsheet

Travel
Do not travel by airplane until the gas bubble has gone.

Anaesthetic
If you need to have a general anaesthetic while gas is in your eye, you must tell the anaesthetist.

This exclusion does not apply once the gas has fully absorbed. You will notice the bubble shrinking and will be aware when it has completely gone.

Work
Most people will need two weeks off work after their operation, depending on the type of work they do and the speed of their recovery.

Your vision will be reduced while the gas bubble is in your eye and this also affects your depth perception. Discuss this with your surgeon before you decide what to do.

Risks of a retinal detachment operation

As with any operation, there are a number of risks to be aware of when having a retinal detachment operation.

Retinal detachment surgery is not always successful. Every patient is different and some retinal detachments are harder to treat than others. Some patients may need more than one operation. We will explain these risks and benefits with you before you give your consent for the operation.

- **Unsuccessful operation**
  The success rate for retinal detachment surgery is approximately 80% with a single operation. The operation may be unsuccessful if new tears form in the retina or the eye forms scar tissue which contracts and pulls the retina off again. This means that one in five people (20%) will need more than one operation.

- **Cataract**
  If we use a gas or oil bubble as part of the operation, it is likely that you will develop a cataract in the eye within the first 18 months. A cataract is when the lens of the eye becomes cloudy. We can remove the cataract with a short operation later.

- **Infection**
  Any surgical procedure carries a risk of haemorrhage and infection but in retinal detachment surgery this risk is very low (less than one in a thousand). Although it is rare, it does have serious consequences as it can cause blindness.

- **Raised eye pressure**
  It is not uncommon for the pressure in the eye to increase after a vitrectomy operation. In most cases it does not last long and can be controlled with extra eye drops and/or tablets to reduce the pressure. Most patients will be given some of these medications routinely, straight after the surgery, to minimise any pressure increase. Your eye pressure will be checked at your subsequent clinic visits. If the pressure is extremely high or lasts for a long time, there may be some damage to the optic nerve. This would necessitate long term treatment and monitoring.

Once you are discharged from the vitreoretinal service it would be prudent to include a full glaucoma test in the annual review conducted by your optometrist or optician, as there is a small risk that you might develop eye pressure problems some time later.
What will happen if I do not have the operation?
You may have lost some vision already from the retinal detachment and without the operation you will lose all vision in the affected eye. We hope to improve your vision, but even after a successful operation your vision may not return to normal.

What can I expect for my vision?

Initially the vision will be blurry due to either the bubble blocking the vision (quite blurry), or due to the small change in the shape of the eye with a scleral buckle (slightly blurry). Where the gas bubble has been used, the vision will start to sharpen up once the fluid level has dropped below the halfway point. The blurriness related to the buckle tends to reduce over time and most of it may be corrected with glasses.

The level of vision is principally determined by whether or not the central part of the retina (macula) was involved in the retinal detachment. If it was not involved, we would expect your vision to return to close to how it was before the detachment (cataract not withstanding). If the macula was involved, it can be difficult to predict just how much clarity you will have with your central vision. It should be much better than prior to the surgery, but some distortion and blurriness may remain.

Useful links
RNIB
www.rnib.org.uk
Telephone: 0303 123 9999
Email: helpline@rnib.org.uk

Contact us
Eye unit
Southampton General Hospital
Tremona Road
Southampton
SO16 6YD