

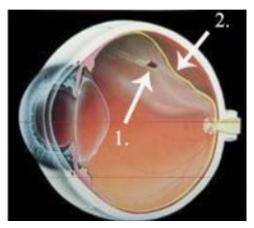
# Retinal detachment surgery Information for patients

Your eye doctor has advised you to have retinal detachment surgery. It is important that you understand what this means, and the risks and benefits of treatment.

### What is a retinal detachment?

The retina is a layer of nerve cells inside your eye. It sends signals to your brain when light falls on it. The macula is the area of retina used for fine central vision- for things like reading and recognising faces. A retinal detachment is a separation of the retina from the layers underneath. This causes the area of affected retina to stop working and this is why you may have noticed a shadow across your vision. A detachment usually starts at the edge of the retina, but it can start from the top, either side, or bottom.

Unfortunately, without treatment a retinal detachment **usually leads to blindness** in the affected eye.



This picture shows a cross-section of an eye

- 1. A tear in the upper retina
- 2. The retina has separated from the layer underneath. This is a retinal detachment.

### What causes a retinal detachment?

A retinal detachment usually develops from a tear in the retina that allows fluid from inside the eye to move under the retina and lift it away from the layers underneath. Sometimes the tear can break small blood vessels and cause bleeding inside the eye. Most retinal tears and detachments occur as part of the ageing process and not because of anything you have done. Being very short-sighted, having had a severe blow to the eye, or having cataract surgery, can all increase the chance of a retinal detachment. Rarely retinal detachment can run in families.

### What is the treatment for a retinal detachment?

Retinal detachment is treated with an operation. This is usually done under local anaesthetic by means of an injection around the side of the eye. The operation is done by a specialist vitreo-retinal surgeon. Often this specialist will closely supervise a junior surgeon who may do some or all of the operation.

The most common operation is called a **vitrectomy**. During the operation the surgeon removes the gel from inside the eye, flattens the retina, and seals tears in the retina with laser. The retina is flattened with a **bubble of gas**, or sometimes silicone oil or another liquid. The operation is done through very small openings in your eye, using keyhole surgery. Sometimes these openings are closed with a small stitch at the end of the operation. These dissolve after 4 to 6 weeks. You will usually have a pad and shield over your eye after the operation. This is removed the next day.

Another type of operation is called a **scleral buckle**. It repairs the detachment by permanently attaching a splint (called a buckle) to the outer wall of the eye (the sclera), just under the very outermost layer of the white of the eye (the conjunctiva). In this case the retinal tear is usually sealed from the outside with a freezing treatment. Each type of operation has advantages for different patients.

### What are the benefits of retinal detachment surgery?

The aim of treatment is to reattach the retina and stop your vision getting worse. There is an 80% to 90% chance of permanent reattachment. The operation may also bring back some of the vision you have lost, but your vision is unlikely to be as good as it was before the retinal detachment.

### What are the risks of retinal detachment surgery?

There is a chance that more than one operation will be needed to reattach the retina (10% to 20% of patients). Rarely a serious complication such as infection or bleeding can occur because of the operation that causes permanent loss of vision (less than 1 in 1000 patients).

After operations with a gas bubble, it is very common to develop a cataract, but this can be treated easily with standard cataract surgery. It is possible for the gas bubble to put too much pressure on your eye, and this could damage your eye if not treated. In rare cases after an operation with a scleral buckle, patients can develop double vision, movement of the buckle through the conjunctiva, or discomfort from the buckle.

#### After your operation

Your eye will feel uncomfortable, gritty, and itchy for a week or two. It may also look red or bruised. Regular paracetamol is usually enough to treat the discomfort. You will receive eye drops to reduce inflammation and prevent infection. Please **do not rub your eye** as this can introduce infection. Your eye will heal over the next 6 weeks, but your vision might continue to improve for several months.

## Having a bubble of gas in the eye

If you have a **gas bubble** in your eye, your vision will be very poor immediately after the operation. You will be instructed to **position your head correctly** to make sure the bubble presses against the area of retina that needs treatment. This is usually needed for 7 days. There is a separate information leaflet about **posturing**. As the gas bubble disappears downwards you will begin to see over the top of the bubble.

**You must not fly until the gas has disappeared** because the bubble will expand and damage your eye. You must also **not have nitrous oxide anaesthetic** ('gas and air', or 'laughing gas') for the same reason. We use these types of gas bubble:

- C3F8 which stays in your eye up to 12 weeks
- C2F6 which stays in your eye for 8 weeks
- SF6 which stays in your eye for 4 weeks
- Air which stays in your eye for 2 weeks.

Your surgeon will tell you which gas is in your eye.

### When to seek help

It is normal to have some discomfort after your operation, but you should contact Ward E2 immediately (**0131 536 1172**) if you have:

- Severe pain not helped by paracetamol
- Headache and nausea, or vomiting
- Loss of vision after initial improvement
- Worsening redness of your eye.

## **General advice after retinal surgery**

- Use your eye drops as instructed
- Stay off work and take it easy for 3 weeks
- Feel free to read or watch TV in moderation
- You can shower, but avoid getting water or soap in your eye
- Wear your own glasses if they help you see. Wear sunglasses for comfort
- Avoid heavy lifting or straining for 3 weeks. For example, refrain from gardening and sport, and take a less active role sexually. Drinking plenty of water and eating fibre can help prevent straining from constipation
- Do not drive until after your first clinic appointment
- Do not rub your eye.

### Cancellation

While we make every effort to avoid this where possible, there is always a risk that your operation may be cancelled at short notice. This is due to either emergency patients who require urgent surgery or other reasons which are beyond our control. We realise that this can cause distress and inconvenience, but in the event that your surgery is postponed, you will be offered a new date as soon as possible.

### **Keeping your appointment**

If you cannot keep your appointment, or have been given one that is unsuitable, please change it by phoning the number on your appointment letter. Your call will give someone else the chance to be seen and will help us keep waiting times to a minimum.

### **Public transport and travel information**

Bus details available from: Lothian Buses on 0131 555 6363 www.lothianbuses.co.uk

Traveline Scotland on 08712002233 or www.travelinescotland.com

Train details available from: National Rail Enquiries on 03457 484 950 or <u>www.nationalrail.co.uk</u>

### **Patient transport**

Patient transport will only be made available if you have a medical/clinical need. Telephone **0300 123 1236** (calls charged at local rate) up to 28 days in advance to book, making sure you have your CHI Number available. Hard of hearing or speech impaired? Use text relay: **18001-0300 123 1236** (calls charged at local rate). To cancel patient transport, telephone 0800 389 1333 (Freephone 24 hour answer service).

### Interpretation and translation

Your GP will inform us of any interpreting requirements you have before you come to hospital and we will provide an appropriate interpreter. If you are having this procedure as an existing in patient, staff will arrange interpreting support for you in advance of this procedure. This leaflet may be made available in a larger print, Braille or your community language.

### **Useful contacts**

Ward E2, Princess Alexandra Eye Pavilion, Chalmers Street, Edinburgh, EH3 9HA

0131 536 1172

### **Useful web links**

The British & Eire Association of Vitreoretinal Surgeons – <u>https://beavrs.org</u>