RETINAL DETACHMENT

What is retinal detachment?

The retina is the light sensitive layer at the back of the eye. A retinal tear can form on the retina (typically after a posterior vitreous detachment) which leads to fluid collecting underneath the retina, which then proceeds to detach like a wallpaper coming away from a wall. Retinal detachment is uncommon and affects 1 in 10,000 people.

If you have had a retinal detachment in one eye, then there is a small risk of developing retinal detachment in the other eye. If there are weak areas, then laser treatment to strengthen the retina may be recommended. However, if the fellow eye has already had a posterior vitreous detachment then you should be at low risk of developing a retinal detachment.

What are the symptoms of a retinal detachment?

Floaters in the vision

Sometimes flashing lights

Development of a shadow which extends from the peripheral vision towards the centre until vision is lost.

What are the risk factors?

Short-sighted (myopic) people

Previous cataract surgery (particularly if it was complicated)

Previous history of eye injury

Family history of retinal detachment

How can it be treated?

Retinal surgery is usually required and successful in reattaching the retina in one operation in 9 out of 10 patients. There are 2 ways of treating retinal detachments which depends on the features of the retinal detachment and age of the patient:

EXTERNAL: Scleral buckling surgery combined with cryotherapy

INTERNAL: Vitrectomy combined with endolaser and gas or oil injection

Scleral Buckling surgery

This technique is to reattach the retina using a technique on the outside of the eye. The retinal tear is treated with cryotherapy (freezing) to seal it, and a piece of silicone rubber (the buckle) is stitched to the surface of the eye (the sclera) overlying the retinal tear. This produces a dent in the outer wall of the eye, which moves towards the tear in the retina to close it. Sometimes fluid is drained from under the retina externally, and a gas or air bubble

may be placed in the eye to help close the tear. The sclera buckle does not usually have to be removed. This is usually reserved for young patients as their vitreous (gel) in the eyes is still solid which makes it difficult to remove using the vitrectomy technique.

Vitrectomy surgery

A vitrectomy is an operation within the eye to remove the vitreous jelly. This is combined with draining of fluid from underneath the retina, and then the tear on the retina is sealed by cryotherapy or laser treatment. The retina is then held in place by a gas bubble or oil bubble. This gas bubble is absorbed naturally over 2 to 10 weeks or so after surgery depend on the type of gas used and completely disappears. Patients must not fly while they have a gas bubble in the eye. If an oil bubble is used in surgery then it has to be surgically removed at a later date. While a gas or oil bubble is in the eye the vision will be impaired.

What is it like to have a gas bubble in the eye?

The vision is blurred if there is a gas bubble in the eye, rather like having your eyes open under water. As the gas bubble gets smaller patients notice it's edge as wobbly line in the upper field of vision. This will then drop across the field of vision, the bubble then being seen as a round blob before it disappears.

Why do I have to posture with a gas bubble?

The gas bubble, by it's buoyancy, is used to seal the retinal break while the laser treatment or cryotherapy forms a scar, which takes about 5-7 days. To make sure that the bubble is pressing on the retinal tear, you will be asked to position your head so that the tear is uppermost. The best position to treat your detachment will be discussed with you after surgery. You do not need to be in position continuously: we recommend 45 minutes in the hour, day and night for 7 days.

Will my vision get back to normal?

It is important to appreciate that there are 2 parts to vision: central (reading) and peripheral vision. Peripheral vision tends to return to normal after successful retinal detachment surgery. Central vision returns depends on whether the central part of the retina, the macula, was detached prior to surgery (a "macular –off" detachment), and how long it has detached for. If the macula was attached prior to surgery (a "macular-on" detachment) the outlook is very good and central vision may return to normal. If the macula was detached for more than a few days prior to surgery, then it is unlikely that it will entirely return to normal. The longer the macula is detached prior to surgery then less visual improvement can be expected after surgery. Therefore, it is important to have a retinal detachment treated as soon as possible before the macula detaches.

How will I feel after retinal detachment surgery?

Vision will be blurred until the gas bubble has gone. Flying or driving is not recommended while the gas bubble is present. The eye will be uncomfortable and scratchy if sutures have been used for the first few days. No heavy activity for the first few weeks but only gentle exercise. Working is not recommended if positioning is required in the first week. Swimming is not recommended until 4 weeks or so after surgery.