What is retinal detachment?
The retina is the light sensitive membrane at the back of the eye. If a tear forms on the retina (which can occur after a posterior vitreous detachment), fluid can collect underneath the retina, which then proceeds to detach, rather like wet wallpaper coming away from a wall.

What are the symptoms of a retinal detachment?
Patients usually have symptoms with an onset of floaters in the vision, and sometimes flashing lights, followed by the development of a shadow which extends from the peripheral vision towards the centre until reading vision is lost. Without treatment of a retinal detachment the eye will usually become blind. Occasionally patients have no symptoms at all, so-called asymptomatic retinal detachments. These may be treated differently, and if very longstanding, no treatment may be required. However this is unusual.

What are the risk factors?
Overall retinal detachment is uncommon, affecting only about one in ten thousand people. However certain groups are at increased risk:
- Short-sighted (myopic) people
- Previous cataract surgery (particularly if it was complicated)
- Previous history of eye injury
- Patients with a family history of retinal detachment

How can it be treated?
Retinal detachments can be treated. Surgery is usually successful in reattaching the retina in one operation in 9 out of 10 patients. However this means that further surgery is occasionally required in some patients. There are 2 ways of treating retinal detachments. The appropriate technique used 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 injection

Scleral Buckling surgery
In some patients, usually the young, it may be best to reattach the retina using a technique on the outside of the eye (external technique). 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.
Vitrectomy surgery
A vitrectomy is an operation within the eye (internal technique) 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 very occasionally an oil bubble). This gas bubble is absorbed naturally over 2-6 weeks or so after surgery 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. The vast majority of patients have their retinal detachment treated by the vitrectomy and gas bubble technique: if Mr Charles feels that the detachment would be best treated with the oil technique he will discuss this with you.

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 a 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.
If the tears are at the top of the eye it is enough to have your head in a normal upright position after surgery. You may however be asked to have your face pointing down at the floor or lying on one side, depending on where the retinal tears are. 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 50 minutes in the hour, day and night for 7 days, although some patients may need to posture for shorter and some longer. Mr Charles will discuss this with you.

Will my vision get back to normal?
It is important to appreciate that there are 2 parts to vision: central (ie: reading) and peripheral vision. Peripheral vision tends to return to normal after successful retinal detachment surgery.
How much the central, or reading, vision returns depends on whether or not the central part of the retina, the macula, was detached prior to surgery (a “macular –off” detachment), and for how long. If the macula was attached prior to surgery (a “macular-on” detachment) the outlook is very good and central vision should 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?
Your vision will be blurred until the gas bubble has gone. You should not fly or drive while the gas bubble is present. The eye will be uncomfortable and scratchy if sutures have been used for the first few days. You should take things easy for the first few weeks, with only gentle exercise. Having a retinal detachment is a very stressful time for patients and you may feel tired for 2 to 3 weeks after surgery. You should not be working while you are meant to be positioning. I would not recommend swimming until 4 weeks or so after surgery. However when everything has settled down there should be no limits on your activities: as long as it is legal of course!!

Risk of retinal detachment in your other eye
If you have had a retinal detachment in one eye, then there is a small risk of developing retinal detachment in the other eye. Mr Charles will carefully examine your fellow 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.

Appointments
If you do feel that you have symptoms of a retinal detachment then you should consult an eye specialist urgently. For general enquiries, if you feel that you may have a retinal detachment, and if you wish to discuss how to make an appointment with Mr Charles, please ring 07730 714619.

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