



# Retinal detachment surgery and aftercare

**Colchester Eye Centre Colchester Primary Care Centre** *Tel:* 07780 005814 *Monday to Friday, 9am–5pm* 



(DPS: 05732-21)

This booklet is designed to help you understand what a retinal detachment is, what the surgery for a retinal detachment entails and explain the care that is needed afterwards. The information will help you to decide whether to have the operation. You might want to discuss it with a relative or carer. Before your operation you will be asked to sign a consent form, so it is important you understand this booklet before you decide to go ahead with surgery.

#### What is a retinal detachment?

The retina is a layer of fine tissue that lines the inside of the eye and which senses light. Unfortunately, your retina has started to peel away from the walls of the eye. The effect is the same as wallpaper peeling away from a wall.

#### What causes a retinal detachment?

It can happen for a variety of reasons, such as an eye injury, previous surgery or short sightedness, but it is usually a result of the normal aging process. The vitreous gel inside the eye is firmly attached to the retina. With age, the vitreous becomes thinner and separates from the retina, but in doing so it sometimes pulls a small piece of retina away with it, causing a hole to form.

This hole then allows fluid to penetrate behind the retina, causing it to begin to peel off. Vision is lost where the retina has detached. You will notice a shadow in your vision.

As the detachment progresses, your central vision may also be affected.

#### What can be done to help?

The only way to fix this problem is an operation called a vitrectomy.



#### What happens if I do not have the operation?

Untreated retinal detachments can lead to devastating vision loss in the affected eye and there is a 10% risk of the other eye developing a retinal detachment. The ophthalmologist will examine that eye for any signs of this and, if necessary, will take preventative measures.

#### How successful is the operation?

This varies from patient to patient, depending on how much of the retina is detached, how well it heals and how long the retina has been detached. There is an 85-90% success rate for a single operation and 10-15% chance of further surgery being required.

Success is defined as the retina remaining flat against the inner wall of the eye. In a successful operation it is possible you may still find your vision poorer than before the detachment.

Sometimes the retina tries to heal itself but this healing response is unhelpful because it produces excessive scar tissue. Like all scar tissue it contracts (shortens), which in turn causes the retina to detach again. This response is called 'proliferative vitreoretinopathy' (PVR). PVR is associated with poorer vision and may cause the retina to detach again after successful surgery to reattach it, so if this happened you might require multiple operations. In a few cases, severe PVR has already begun even before the first operation.

If the macula is involved as part of the retinal detachment, your central vision will improve over time (usually three months) but it may not be as good as it was before the retinal detachment. There may also be some distortion of vision (straight lines looking bent or crooked, or faces looking squashed), because sometimes the macula does not re-attach totally flat, which distorts the retinal receptors. This distortion may settle over time.

After the operation your peripheral vision should be improved and the shadow in your vision gone.

#### What happens next?

If you wish to proceed with surgery you will be given a date for your operation. You may need to have a pre-assessment before coming in for surgery, which will include taking note of any medications and questions about your general health, to determine if you are fit enough for eye surgery.

It is important at this stage to determine the following:

- that you will be able to lie flat on your back for the operation, which usually lasts 90 minutes
- that you will be able to put in eye drops after surgery for approximately one month, or have someone available to help you
- that you will be able to arrange transport to and from the hospital for your operation and follow-up appointments.

It is important to know these details now so that other arrangements can be made if necessary.

Your operation will be carried out under local anaesthetic as a day case at Colchester Eye Centre. This means that you can eat and drink on the day of your operation and you will spend only 4–6 hours in hospital.



#### The day of the operation

On the day of your operation you should report to the Eye Theatres Admissions Unit, which is located on the first floor of the Primary Care Centre. It is well signposted from the main entrance. On arrival, show your appointment letter to the clerk or nursing staff. You will then be directed to a seating area. You do not need to get undressed for vitreoretinal surgery but we suggest you wear loose fitting, comfortable clothes. Do not bring valuables with you. It may be useful to bring something to eat.

The nurse will carry out a few preliminary checks, including blood pressure and pulse You will also be given eye drops to enlarge the pupils of the eyes, up to one hour before your operation. A member of the surgical team will examine your eye and discuss the risks and benefits of surgery before asking you to sign a consent form.

#### Surgery

Surgery is performed under a local anaesthetic, which means you will be awake during the operation. A local anaesthetic involves introducing solution into the tissues surrounding the eye to numb the area. The operation will take about 90 minutes. A nurse will hold your hand throughout, so if you need to move or feel any discomfort, you can let them know by squeezing their hand.

You will need to lie flat and it is important you keep still during the operation. Your head will be covered so you will not be able to see what is happening but you may be aware of a bright light. There are three stages to the operation: a vitrectomy, followed by laser or freezing treatment, and finally insertion of a gas bubble.

#### • Vitrectomy

A vitrectomy involves your surgeon using tiny instruments to remove the vitreous gel from the centre of your eye. Adults do not need the vitreous inside their eye. Natural fluids produced inside your eye will eventually refill the cavity.

#### • Laser or freezing treatment

Once the vitreous gel is removed the holes are identified and sealed with laser or freezing treatment (cryotherapy). This causes a scar to form, which completes the sealing process over the following 7-10 days.

#### Gas bubble insertion

The final part of the operation involves injecting a gas bubble (or sometimes silicone oil) into the centre of your eye which, when it comes into contact with your retina, helps to hold it in place as it heals. This bubble will remain in the eye for 2-12 weeks but will disappear by itself. If silicone oil is used you will need a further operation to remove it at a later date.

At the end of the operation, small dissolvable stitches may be put in the eye and an eye pad dressing applied. You will return to the admissions and discharge unit to recover and 'posture'.

#### Posturing and gas bubble

Posturing is a term used to describe the position your head has to adopt for seven days after your operation because a bubble of gas was injected into your eye. In order for the bubble to work, it must be pushing against the area where the hole/tears were in the retina. This keeps the retina flat and allows scar tissue to form and seal the holes. This can be achieved only by posturing for 45–50 minutes of every hour during daytime and by sleeping on your left or right side at night time.

The nurse will explain how to posture and give verbal and written instructions before you go home.

Some points to remember about the bubble:

- initially the bubble is large enough to make your vision worse, because the gas makes everything out of focus. This will last up to 2–3 weeks
- as the bubble reduces in size it will appear as a fluid level (like a spirit level). You will be able to see above this line. This is where the gas meets the fluid, which gradually replaces the gas bubble. The line will move in your vision with head movements and over time you will see more
- the bubble will disappear by itself between two and 12 weeks, depending on the type of medical gas used, eventually breaking up into smaller bubbles and disappearing completely from vision
- as long as there is gas in your eye, you must not fly in a plane, because changes in air pressure will cause the bubble to expand, which will result in pain and can lead to loss of sight
- to a lesser extent, the same thing happens with changes in atmospheric pressure, so no bungee jumping or scuba diving!
- if you need to have a general anaesthetic, please tell the anaesthetist you have a gas bubble in order to avoid the use of nitrous oxide, which can cause a dangerous rise in eye pressure

• do not lie on your back until the bubble disappears completely.

#### If you have silicone oil instead of gas

If you have silicone oil in your eye, posturing is not always necessary. Your vision will be clearer than patients with a gas bubble but it will not be as good as your vision before the retinal detachment.

The oil will need to be taken out after approximately 6–8 months, which will require a short operation lasting only 30–45 minutes.

#### Why do I have oil and not gas?

Oil is used for larger detachments and if the surgeon believes there is a high chance of re-detachment, as in cases of PVR. These detachments take longer to heal and the gas would disappear before healing is complete. Oil lasts longer, so allows for better stabilisation in large or complicated detachments.

#### Discharge

Before you go home, we will give you verbal and written information on aftercare and a minimum of three different eye drops, which you will use for one month. These drops are used to prevent infection and to help make the eye feel more comfortable. If your eye is difficult to open, you may find it easier if your partner/friend helps you. Drops are continued for one month. The nurses in the admission and discharge unit will discuss how and when to put in your drops.

We strongly recommend that you arrange for a relative or friend to take you home. You may prefer someone to stay with you overnight. This is especially important if you



cannot rely on the other eye for good vision or 'posturing' following insertion of a gas bubble (see section for posturing and gas bubble).

#### Recovery

It is unusual to experience severe pain after this type of operation, although you may be aware of mild discomfort or a scratching sensation.

If you have discomfort, we suggest you take pain relief such as paracetamol every 4–6 hours (maximum of eight tablets in 24 hours) but not aspirin, which can cause bleeding.

The eye may be red and feel 'gritty' or even itchy after surgery and this may last for 7–14 days. Please do not rub the eye and ensure that you wash your hands thoroughly before and after using eye drops. Fingernails should be kept short and clean.

You may need prompt treatment if you experience any of the following symptoms:

- severe pain
- loss of vision (if a gas bubble is inserted your vision will be affected by its presence in the eye)
- nausea, headache or intolerance of lights
- increased redness.

Please contact us urgently on one of the numbers on page 11 of this booklet, or on your post-operative information leaflet, if affected.

#### **Appointments after surgery**

- The day after surgery a nurse will telephone you.
- 7-10 days after surgery you will see the consultant or one of his team, who will check that your eye is healing well. You will be advised which, if any, of the drops you can stop
- One month after surgery you should have finished all your drops. We will be able to scan your retina to see how well the macula is healing. A further appointment will be scheduled for 2–3 months later.

#### **Risk of complications**

- There is a less than 1 in 1,000 chance of developing a serious infection or haemorrhage in the eye, which can result in complete loss of vision in the affected eye.
- 10% of patients may experience increased pressure, which can be treated with eye drops.
- One of the most common side effects is the formation of a cataract. Approximately 70–90% of patients develop a cataract in the first year after surgery. If the cataract is significant, you may need an operation. This surgery is far less complicated and requires no posturing afterwards.



#### **Frequently asked questions**

#### I live on my own. How am I going to cope?

We recommend you arrange for someone to help at home for at least a week while you are posturing. Ask your family or friends to help for two weeks, especially with shopping. Before coming to hospital, stock up with ready-meals to pop in the oven or microwave.

#### How do I wash my face?

You can apply a shield and wash your face with a flannel, and shave. If your eye needs bathing, use warm boiled water. Gently clean your eye using some cotton wool, while keeping your eye closed. Do not press down on the eyeball. Wipe gently from the nose outwards and discard the cotton wool after each wipe. Repeat until the lids appear clean. Avoid rubbing your eye and avoid smoky or dusty environments.

#### When can I go back to work?

You will not be able to return to work while you are still posturing. It also depends on what you do and whether the gas bubble is disturbing your vision, which may interfere with your work.

Work can usually be resumed within a month but heavy manual work may require a longer convalescence period. We can discuss this with you when you attend for your follow-up appointment.

#### When can I drive?

You should not drive until after your doctor at the hospital advises it is safe to do so.

#### Can I watch TV and read books?

Yes but if your eyes begin to feel tired, stop and rest for a while.

#### Can I do the gardening?

Do not do any gardening until we have checked your eye(s) first. When you resume gardening, it is best to start with light gardening, such as potting plants etc.

Wear either your glasses or protective eyewear. Wait at least two months before lifting heavy compost bags or undertaking any heavy manual work. It will depend on how your eye is settling down and we will be able to advise you.

#### Can I cook and do the housework?

Light housework, such as washing-up and vacuuming, may be carried out in your 10-15 minutes breaks. Have quick meals to put in the microwave.

#### Can I go shopping?

Ask someone else to do the shopping until you have stopped posturing. Then you may go shopping as long as you do not strain to pick up heavy bags, because it is best to refrain from heavy lifting for three months.

#### Can I travel?

You can travel as long as you keep your head in the desired position. You must not fly until we have checked that all the gas has gone, however. After you have stopped posturing, you can travel in a car, bus or train.



#### I enjoy walking, jogging, swimming and going to the gym. When can I start again?

Gentle jogging or lifting light weights at the gym or exercise classes can possibly be resumed six weeks after surgery but contact sports, such as rugby or heading a football, should be avoided for longer. Swimming may be resumed once you have completed the eye-drops and your eyes feel comfortable with no irritation, but it is best to check with us first.

### Will I damage my eye if I move my head quickly / sneeze hard / cough or bend down to lift something?

You must not strain to lift anything very heavy for at least three months. Sneezing and coughing and moving quickly will not damage your eye.

#### When can I stop being careful?

The first three months is a crucial period for the eye to settle down. During this time you must not over exert yourself. Take things easy and slowly. In the long term, you must avoid any trauma to the head or eye, such as falling and banging your head, which may disrupt the retina and macula.

#### Will I need glasses?

If you wear glasses already, the lens over the operated eye may need changing three months after surgery. If you did not wear glasses before, it may be necessary to wear them in order to obtain the best possible vision.



#### Can I wear contact lenses?

If you already wear prescriptive or cosmetic contact lenses you should stop wearing them for at least six weeks after your operation because you are using eye drops. Once you have finished the drops, we will assess the eye's suitability for contact lens wear.

**Please note** these time limits above are just a guide. Always check with the ophthalmologist first.

#### **Contact details**

If you are worried or unsure about your individual circumstances please telephone **07780 005814**, Monday to Friday, 9 am – 5 pm.

**Out of hours** – Weekdays 5 pm – 7 pm and weekends and bank holidays, 11 am – 4 pm, please telephone **01206 286882**, or contact your GP, or go to a walk-in centre or the nearest accident and emergency department.



#### **Your experience matters**

We value your feedback. Please help us improve our services by answering a simple question, in our online survey – "Overall, how was your experience of our services?"

This survey is known as "The Friends and Family Test".

You can either scan this QR code with a smart phone camera:

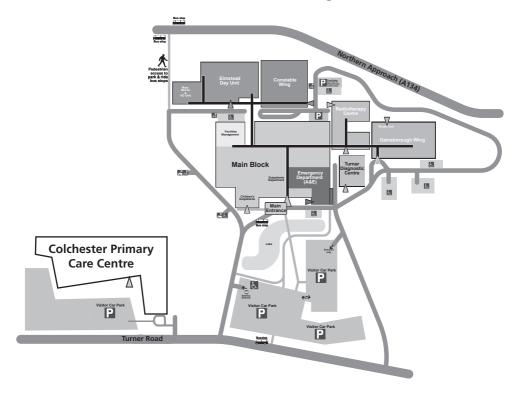


Or type the following web address into your browser: www.esneft.nhs.uk/get-involved/your-views-matter/friendsand-family-test/

Thank you very much.



#### How to find Colchester Primary Care Centre



## Please ask if you need this leaflet in an alternative format.

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