

Pars Plana Vitrectomy Surgery and Aftercare

Introduction

This leaflet is designed to help you understand what vitrectomy surgery entails and explain the care that is needed afterwards. This information will help you to decide whether to proceed and 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 that you understand this leaflet before you decide to go ahead with surgery.

Consent

We must by law obtain your written consent before any operation and some other procedures. The doctor will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the proposed treatment please do not hesitate to discuss further.

What is the vitreous?

The vitreous is a clear jelly-like substance within the eye which fills the space behind the lens at the front of the eye and the light sensitive layer called the retina at the back of the eye. It is 99% water, the other 1% consists of substances such as protein.

What is a vitrectomy?

This is an operation in which the surgeon removes the vitreous to clear blood and debris from the eye. The vitreous is also removed if it is pulling or tugging the retina from its normal position. Adults do not need the vitreous inside their eye. Natural fluids produced inside your eye will eventually refill the cavity.

Some of the common eye conditions that require vitrectomy include:

- complications from diabetic retinopathy, such as retinal detachment or bleeding
- macular hole
- retinal detachment
- epiretinal membrane
- bleeding inside the eye (vitreous haemorrhage)
- injury or infection
- certain problems related to a previous eye surgery

The retinal surgeon performs the procedure using a microscope and special lenses designed to provide a clear image of the back of the eye. Small incisions are made into the white of the eye and the instruments are inserted through.

Consideration before surgery:

It is important to determine the following:

- that you will be able to lie flat on your back for the operation which usually lasts 60 minutes
- that you will be able to put in eye drops after surgery for approximately one month or have someone available to help

On the day of surgery**Local anaesthesia**

You can eat and drink on the day of your operation and you will spend 4-6 hours in hospital. 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 local anaesthetic involves introducing solution into the tissues surrounding the eye to numb the area. 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.

General Anaesthesia

You can not eat for six hours before we take you to the operating theatre, although you may drink sips of water up to two hours before the operation. Prior to surgery an anaesthetist will speak to you and examine you on the ward.

When you arrive in the operating theatre's anaesthetic room the anaesthetist will give you an injection in your hand or arm. You will then stay asleep for the whole operation. The anaesthetist will monitor your heart rate, breathing, blood oxygen and blood pressure while you are under the anaesthetic. You may feel tired and sleepy for about six hours following your surgery.

Discharge

Before you go home we will give you verbal and written information on aftercare and different eye drops. 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 8 tablets in 24 hours) but not aspirin which can cause bleeding. The eye may be red and gritty or even itchy after surgery which may last 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, intolerance of lights
- increased redness. Please contact us urgently (numbers at the end)

A follow up appointment after surgery will be booked to see the consultant to check that your eye is healing well.

- you should have finished all your drops one month after surgery
- we will do a scan of your retina to see how well the retina/macula is healing
- another appointment will be scheduled for 2-3 months time

Risks and Complications

- 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
- 10% of patients may experience raised pressure which can be treated with eye drops
- 4-5% risk of a retinal tear which will need treatment that will include a gas bubble. If this is needed we will ask you to posture. Clear instructions will be given
- 1% chance of developing a retinal detachment after surgery which will require another operation to correct
- less than 1 in a 1000 chance of developing a serious infection or haemorrhage in the eye which can result in total blindness

What are the signs of infection or raised pressure?

- nausea, headache, severe pain, intolerance of lights
- painful red sore eye
- sticky discharge
- any deterioration in vision

What are the signs of a retinal detachment?

- light “flashes”
- the presence of a shadow which partly obscures vision that may spread over time
- large “floaters” or spots

If you experience any worrying symptoms please contact us immediately.

Posturing

This is a term used to describe the position your head has to adopt after surgery because a bubble of gas or air was injected into your eye during the operation (see separate leaflet).

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 between 2 and 12 weeks by itself 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 resulting 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 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

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 the shopping. Before your admission to hospital stock up with ready meals to heat 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/dusty environments.

When can I go back to work?

It depends on what you do. Usually you within a month but heavy manual work may require a longer convalescence period.

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, you will not damage your eye. 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 when you are mowing the lawn to prevent anything from getting inside your eyes. 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 accordingly.

Can I cook and do the housework?

For the first two weeks take plenty of rest. You may cook light meals and resume some household chores as long as it does not involve anything too strenuous.

Can I go shopping?

Yes, whenever you feel up to it and your vision allows but avoid lifting heavy bags for at least a month.

Can I travel?

You can travel as long as you feel up to it. However, you must not fly in an aeroplane whilst a gas bubble is present and until after we have checked that all the gas has gone.

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

You can go for a walk whenever you feel up to it. Gentle jogging or light weights at the gym/exercise classes can possibly be resumed six weeks after surgery. Contact sports, eg rugby or heading a football should be avoided for longer. Swimming may be resumed once you have

stopped using the drops and your eyes feel comfortable with no irritation but it is best to check with us first.

Please note these time limits are just a guide. It will depend on individual cases before decisions can be made. Always check with the ophthalmologist 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 as you may add pressure to the eye and make your eye sore. 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 slow. In the long term you must avoid any trauma to the head or eye, falling and banging your head, this may cause the blood vessels to bleed again.

Will I need glasses?

If you wear glasses already the lens over the operated eye may need changing a couple of months after your operation. 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 straightaway after the operation. Wear your glasses. It will be a few months before we would consider advising you to wear contact lenses again because we will need to make sure the front of the eye is suitable and you are no longer using eye drops.

This leaflet is intended to provide only general information for patients. Please do not hesitate to contact us if you are worried or unsure about your individual circumstances.