Vitrectomy surgery

Information for patients

This leaflet answers common questions about having vitrectomy surgery. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse or doctor.

In all cases, a doctor will explain the procedure to you and answer any questions you may have.

In most cases it will be possible for a friend or relative to accompany you for all or part of the procedure. Please ask your nurse or doctor.

What is vitrectomy surgery?
A vitrectomy is a type of operation that treats disorders of the retina and vitreous. The retina is the light-sensing tissue at the back of the eye. The vitreous is the clear, jelly-like substance that fills the middle of the eye.

The following are reasons for why you might require a vitrectomy:
- diabetic retinopathy
- vitreous haemorrhage
- retinal detachment
- infection/severe inflammation inside the eye
- eye injury
- foreign body in the eye
- macular hole
- epiretinal membrane
- certain conditions following cataract or glaucoma surgery

How is a vitrectomy done?
During a vitrectomy operation, the surgeon will make tiny cuts in your eyes and remove the vitreous gel inside. The surgeon will do one or more of the following:
- remove all the cloudy vitreous
- remove any scar tissue present
- remove any foreign object that might be in the eye
- treat the eye with laser or freezing to reduce further bleeding or fix a tear in the retina
- place an air, gas or silicone oil bubble in the eye to help the retina remain in its proper position:
  - If we use a gas bubble, the vitreous gel will replace it naturally over time. There are two types of gas – a short acting gas, which will stay in your eye for up to 4 weeks, and a long acting gas, which can stay in your eye for up to 10 weeks. The surgeon will decide during surgery which gas to use.
  - If we use silicone oil, we might need to remove this with a further operation several months after your first surgery.

Sometimes, at the end of the operation we put stitches in your eye and then put a pad and shield over your eye to protect it.

**Before your procedure**
A pre-assessment appointment with the nurse specialist will be made a few weeks before surgery to carry out necessary tests and answer queries. Please bring all your medicines and glasses to this appointment.

**Anaesthesia for your operation**
Most vitrectomy operations are performed under a local anaesthetic, which means you will be awake for your operation. We will inject local anaesthetic into the area around your eye to numb your eye and prevent you from feeling any pain during the operation. You will not be able to see details of what is happening, but you might be aware of the bright lights or movement in the operating theatre. During the operation, we will ask you to lie as flat as possible and keep your head still.

If you require general anaesthesia or intravenous sedation, you will need to follow specific instructions about eating and drinking prior to your operation. Instructions will be given at the time of your pre-operative assessment.

**On the day of your operation**
Wear loose fitting clothing on the day to avoid contact with the eye when getting dressed after operation.

If your appointment has been scheduled for the morning, please have breakfast before coming in. If your appointment is scheduled for the afternoon, please have lunch before coming in.
If you are having your operation under general anaesthetic or sedation you will be advised when to stop eating and drinking and whether or not you will need to stop taking any of your medicines.

Take your medicines as usual, including eye drops, unless you have been advised not to. Please bring all your medicines with you on the day, in the original containers.

Please arrive at the day surgery unit at the time specified on your appointment letter. We ask you to arrive at this time in order to prepare you for surgery and to ensure you have time to speak to your surgeon before your procedure. You should expect to be in the unit for several hours.

It is not essential to have an escort to the hospital. However, please arrange for an escort to take you home after the operation, and stay with you until the following day or longer if required. You should go home via car/taxi, not public transport. You will not be able to drive yourself home.

**After your vitrectomy**

**Important information**

There are certain precautions you must take after having gas in your eye:

- **You must not fly while you have the gas in your eye** – your doctor will advise you of exactly how long.

- The gas used during vitrectomy surgery can react with another gas called nitrous which can cause problems in your eye if any is administered. Nitrous oxide is commonly used during childbirth and in the emergency department for pain relief. Should you need to go to the emergency department, please inform the doctor at once that you have had gas in your eye.

- **Should you need a general anaesthetic for any reason** following your vitrectomy surgery, **you must tell the anaesthetist** that you have had surgery and gas in your eye.

**What to expect after**

The pad and shield should be removed the morning after your surgery. Please wear the clear eye shield at night-time for one week after your operation.
After your procedure your vision will be significantly blurred, especially if gas was used.

If you had gas, you will notice a line in your vision that moves similar to a spirit level. You will be able to see above the line, but under the line your vision will be fuzzy or blurred. The gas will eventually disperse until it is only a small bubble in the bottom of your eye; the bubble will eventually disappear too. The length of time the gas stays in your eye depends on which gas is used.

We will give you eye drops to use to reduce any inflammation and prevent infection. We will explain how and when you should use them. You will also be advised on whether to continue with any other drops you were on prior to surgery.

Please do not rub your eye.

If you experience discomfort, please take over the counter pain relief, such as paracetamol – do not exceed the dose stated on the packaging.

It is normal to feel itching, sticky eyelids and mild discomfort in the operated eye for five to ten days following surgery. It is also common for some fluid to leak from around the eye. The area surrounding your eyes can sometimes become bruised or swollen. Any discomfort should ease after one to two days.

Generally the redness takes a few weeks to settle. The eye is red as a result of the surgery and this is entirely normal during the post-operative period. It is also normal to develop floaters after vitrectomy surgery, particularly if gas was used.

Dissolving stitches will take four or five weeks to dissolve. Non-dissolving stitches will be removed at your follow-up appointment in the out-patient department.

In most cases, your eye will take about two to six weeks to heal.

**Follow-up appointment**

We will make an appointment for you to see your eye doctor again, usually within seven to fourteen days of your operation, or sooner if your doctor requests.

**Practical advice**
• Try to rest while your eye is healing. You can wear dark glasses or sunglasses if your eye feels more comfortable with them for as long as you need to.

• You can shower and wash your hair, but be careful not to let any soapy water run into your eye for at least four weeks. You should also avoid eye makeup.

• When you can drive again will depend on the vision in your un-operated eye. We will assess this when you attend your post-operative appointment.

• It is safe to do light, gentle exercise, such as walking, after your surgery, but please avoid all strenuous exercise. Please refrain from swimming and gardening until your eye has recovered.

Posturing
This is the hardest part of the recovery process following your surgery, but also the most important.

If we put gas or silicone oil in your eye, we usually ask you to ‘posture’ for up to seven days. This means lying or sitting in a position that keeps your face down so that the bubble floats up and presses the retina into position while it is healing. Your surgeon will advise you if it is necessary for you to posture after surgery and will give you another information leaflet to show you how to do this.

Risks and side-effects
As with any surgical procedure, there are risks associated with vitrectomy surgery. Vitrectomy surgery is not always successful. Every patient is different and some cases are more complicated than others. Some patients may need more than one operation. Your surgeon will discuss the risks and benefits of the operation in detail with you.

The most common risks and side-effects of vitrectomy surgery include:

• bleeding in the eye
• retinal detachment
• vision could become worse or, in rare cases, there could be a total loss of vision
• high pressure in the eye
• inflammation inside the eye
• possibility of a cataract developing
• double vision
• allergy to the medication used
• infection in the eye (endophthalmitis) – this is very rare, but can lead to serious loss of sight.

The risks of vitrectomy surgery are low and complications are not common – in most cases we can treat them effectively. Very rarely, however, some complications can result in blindness.

The above is an outline of the most common risks and side effects, but this list is not exhaustive.

**Your vision after surgery**
After surgery, it usually takes some weeks for your vision to recover. If we used a gas bubble, your vision will be very blurred immediately after surgery. This is normal and you should not be alarmed by it.

Your final level of vision will depend on many factors, especially if your eye condition caused permanent damage to your retina before your vitrectomy.

Your ophthalmologist will discuss your situation with you and how much improvement in your eye sight is possible.

If you experience a lot of pain, increasing loss of vision and/or the redness of your eye increases, please contact us on the emergency number provided below.

**Giving your consent (permission)**
We want to involve you in decisions about your care and treatment. Before carrying out any procedure, staff will explain the procedure to you, along with the associated risks, benefits and alternatives. If you have any questions about your care, or any concerns, please do not hesitate to ask for more information. If you decide to go ahead, you will be asked to sign a consent form that states you agree to have the treatment and you understand what it involves.
Do you have any further questions?
For further advice, please phone the ophthalmic nurse practitioner during clinic hours:

- **Barnet Hospital**: 020 8216 4962
  - Monday to Thursday, 9am-5pm, and Friday, 9am-1pm

- **Edgware Community Hospital**: 020 7794 0500 ext 27202
  - Monday to Thursday, 9am-5pm, and Friday, 9am-1pm

- **Royal Free Hospital**: 020 7794 0500 and ask for the emergency eye nurse on bleep 1931.
  - Monday to Friday, 9am-5pm

- **St Pancras Eye Centre**: 020 3758 2034
  - Monday, Tuesday and Thursday, 8am-5pm
  - Wednesday and Friday, 8am-1pm

- **Whittington Eye Clinic**: 020 7272 3070 ext 4150
  - Monday to Thursday, 9am-5pm and Friday, 9am-1pm

At weekends, evenings or in an emergency:
If you need to contact us in an emergency outside of clinic hours, please call the Royal Free London switchboard on 020 7794 0500 and ask for the on-call ophthalmologist.

Further information
For more information about the ophthalmology service at the Royal Free London, visit our website at: [www.royalfree.nhs.uk/ophthalmology](http://www.royalfree.nhs.uk/ophthalmology)

If you have any feedback on this leaflet or for a list of references for it, please email: rf.communications@nhs.net.

This leaflet is also available in large print. If you need this leaflet in another format – for example Braille, a language other than English or audio – please ask a member of staff.

© Ophthalmology service
Version number: 2
Approval date: March 2018
Review date: March 2020
[www.royalfree.nhs.uk](http://www.royalfree.nhs.uk)