Oxford Eye Hospital

Vitrectomy

Information for patients
What is a Vitrectomy

The vitreous humour is normally a clear, transparent jelly-like substance inside the eye. It lies behind the iris (the coloured part of the eye) and the lens, and in front of the retina (back of the eye). It has no real function other than providing volume to the eye. A vitrectomy is a surgical procedure to remove the vitreous humour.
Why is a vitrectomy necessary?

A vitrectomy may be necessary for a number of reasons:

• A vitrectomy is often part of another operation. For example, if you need a surgical repair to the retina because it has a tear or hole in it, or it has become detached, a vitrectomy is needed for the surgery to take place.

• For diabetic eye conditions where blood vessels from the retina leak and bleed into the clear vitreous jelly, greatly reducing vision.

• After a trauma (accident) to the eye – e.g. to allow a foreign body to be removed from the vitreous jelly or from the retina.

• To take a biopsy (a sample of tissue) from the eye for examination in the laboratory – e.g. to diagnose a serious eye infection.

How is the vitreous jelly removed?

It is usually necessary to have a general anaesthetic, but in some cases a carefully placed local anaesthetic may be used. The type of anaesthetic depends on your particular surgery.

The vitreous jelly is removed through small 1mm cuts made in the sclera (the white of the eye). The jelly is broken up and very gently sucked out. The procedure can take 1-2 hours, depending on the reason for surgery. Once the jelly is removed the retina is repaired if necessary, any foreign bodies removed and, in the case of diabetics, any leaking blood vessels are sealed using laser treatment.
Does the vitreous jelly get replaced?

The jelly does not naturally replace itself and is substituted with one of the following:

- a gas bubble (this is naturally absorbed in 2-3 weeks)
- a special oil or heavy liquid which is not absorbed and is surgically removed at a future date
- air (absorbed in 24-36 hours)
- a mixture of gas and air.

The eye produces its own clear fluid known as aqueous humour which, once the gas or air is absorbed, will gradually fill the vitreous chamber.

What is the risk of complications?

There is a 5-10 % risk of needing further retinal surgery after vitrectomy. The risk of developing a cataract is approximately 30-40%.

Pre-operative assessment

Before your operation you will be asked to attend for pre-operative assessment. Sometimes this can take place as part of your first clinic visit.

At pre-operative assessment we will explain the details of the surgery and answer any questions you may have.
We will take a full history of your general health and eye health and also ask for details of any medications you have been prescribed for general health conditions.

As there is a risk of developing a cataract after vitrectomy surgery, your eye will be measured to assess the power of lens implant that is needed for successful cataract surgery in the future (please see our cataract surgery leaflet).

As vitrectomy surgery is normally performed with a general anaesthetic, it may be necessary to take blood tests and perform an ECG (heart reading) to ensure you are fit for surgery.

**What happens on the day of surgery**

For most patients vitrectomy is performed under a general anaesthetic. We will tell you when to stop eating and drinking before your operation. You will be asked to arrive either early morning if your operation is to be during the morning, or late morning for afternoon surgery.

Normally you will need to stay at least one night in hospital. Please bring with you an overnight bag with night clothes, slippers, dressing gown and toiletries. Please also bring with you, in the original containers, any medications you have been prescribed for general health conditions.
After the operation

- Expect your vision to be blurred for several weeks after surgery. The long term visual outcome is often not known until 4-6 weeks after surgery.

- Expect your eye to be sensitive, swollen and red due to the nature of surgery. This can take up to a couple of weeks to start to improve.

- You will be prescribed a combination of eye drops to instil on your discharge home. These will help to prevent infection, reduce inflammation and rest the eye after your surgery.

- If gas or oil has been inserted into the vitreous chamber you may be advised to position your head tilted downwards. This helps to make sure that the gas or oil is lying against the area of the retina which has been treated. You will need to do this for 4-14 days, depending on your original diagnosis, 50 minutes out of every hour during the day. At night while in bed we advise you to lie on your front.
• If you need to position head down after surgery we try to keep a small supply of neck support pillows on the ward which makes this more comfortable. If you wish to purchase you own pillow please see the attached internet websites which might be useful to you.

http://physiosupplies.com/acatalog/Travel_Pillow.html
http://www.webtogs.co.uk/Lifeventure_Microbean_Travel_Neck_Pillow_100619.html

• We will ask you to attend the eye outpatients 1-2 weeks after your surgery when we will advise you of your progress. Further appointments will normally be necessary.

It is common after vitrectomy for a cataract (clouding of the lens) to develop. At some stage you are therefore likely to need cataract surgery. The possibility and timing of this secondary operation will be discussed with you before your vitrectomy surgery.

Signs to look out for after your operation

• Increasing pain, redness and swelling, light sensitivity and coloured discharge from the eye.

• Worsening of the vision.

If you experience any of these please contact the Eye Emergency department on: Tel: Oxford (01865) 234800

Otherwise, if you have any questions or concerns about your eye, please telephone and ask to speak to one of the nurses: Tel: Oxford (01865) 231117 (for further information)
If you need an interpreter or need a document in another language, large print, Braille or audio version, please call 01865 221473. When we receive your call we may transfer you to an interpreter. This can take some time, so please be patient.