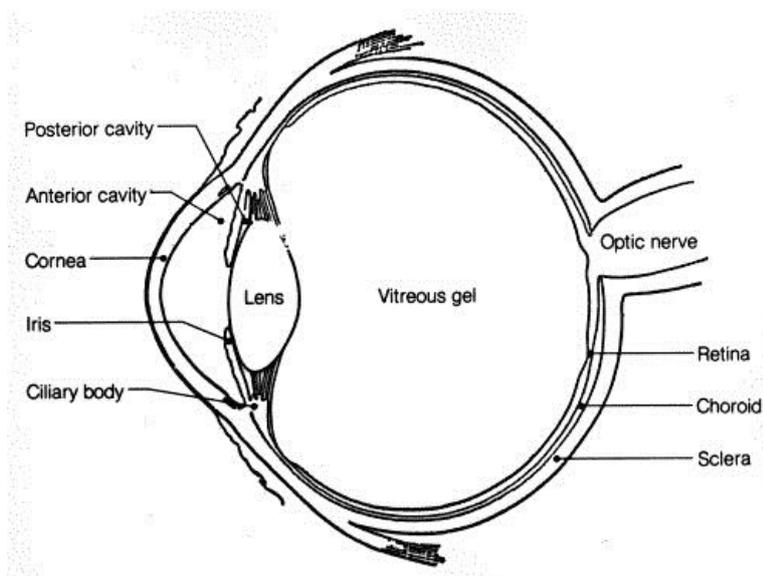


## Patient Information Factsheet for a Vitrectomy

### Department of Ophthalmology

#### What is a vitrectomy?

A vitrectomy is an operation to remove vitreous humour, a clear transparent jelly, from the inside of the eye. Vitreous gel is situated behind the iris, the coloured part of the eye, and in front of the retina at the back of the eye. It has no real function in adulthood and can be safely removed.



#### Why is a vitrectomy necessary?

The general indications for a vitrectomy are:

- Retinal detachment
- Macular hole
- Diabetic vitreous haemorrhage
- Endophthalmitis (a serious eye infection)
- Retrieval of a lens following complicated cataract surgery
- Epiretinal membrane

## How is the vitreous gel removed?

Surgery may be performed either under a general or local anaesthetic when it is deemed necessary.

The surgeon makes three very small incisions through the sclera, the white part of the eye. Instruments are passed through these incisions and they include a microscopic light source, a cutting device that cuts through and removes the vitreous gel in a controlled and gentle way, and an infusion port which is required to replace fluid in the eye, and maintain pressure within the eye during the procedure.

Once the vitreous gel is removed, the retina is repaired if necessary, any foreign bodies are removed and, in the case of diabetes, any leaking blood vessels are sealed.

The procedure may take 1-2 hours to perform.

## Does the vitreous gel get replaced?

**No.** The gel does not naturally replace itself, and a number of substitutes may be used at the end of surgery:

- Gas bubble - absorbed in 2 to 8 weeks depending on concentration used.
- Transparent oil - not absorbed, but surgically removed at a later date.
- Air - absorbed within a week.
- The eye produces its own fluid known as aqueous humour which, as the gas or air is absorbed, will gradually fill the vitreous chamber.

## Inserting a gas bubble

If gas is inserted into the vitreous chamber, your vision will be poor until the bubble gradually absorbs. Looking down whilst holding objects just a few inches away from the eye may produce clearer vision. As the bubble shrinks towards the bottom of the field of vision (about halfway) it may cause some glare or double vision. Patients should avoid lying on their back for long periods, in order to minimise the possibility of the bubble coming forward, which can raise pressure within the eye.

**Avoid flying with air or gas in the eye** - The reduced atmospheric pressure causes the gas bubble to expand, which can raise the pressure in the eye to dangerous levels.

## **Inserting an oil bubble**

Silicone oil is a clear, viscous fluid, which is used in some patients instead of gas.

The main advantages are:

- Quicker visual recovery
- No restriction in air travel
- Less need for head positioning post-op
- Longer duration of effect

However, silicone oil is not absorbed but must be surgically removed.

## **Risks**

The procedure has a good success rate and complications are relatively unusual. However, bleeding, infection, retinal detachment and progression of cataract are potential complications.

There is a rare chance (1 in 1000) of getting a condition called sympathetic **ophthalmitis**, which means that there is an inflammation in the non-operated eye. Most patients who have a vitrectomy will need cataract surgery earlier than they would otherwise. For the vast majority of patients who undergo vitrectomy, there is the prospect of some improvement.

These risks would be explained to you by the consultant prior to you signing the consent form.

## **What to expect after vitrectomy**

The most important factor determining your rate of recovery and final outcome is the pre-operative condition for which the vitrectomy was performed. Your surgeon can advise you on what to expect.

Another important factor is your compliance with post-operative instructions and recommendations.

Expect your eye to be sensitive, red and swollen due to the nature of the surgery which can last for up to one week after surgery.

You will be prescribed a combination of drops to administer on your discharge home. These will help prevent infection, reduce inflammation and rest the eye following surgery. Drops to lower the pressure of the eye are also

sometimes prescribed. You may need to use the drops for several weeks after surgery.

If gas or oil has been inserted into the eye, usually for retinal detachment surgery, you may be advised to position your head according to instructions from the surgeon. This helps ensure that the gas or oil is lying against the area of the retina that has detached, in order to encourage healing. You may be advised to maintain this position for up to 45 minutes of every hour for three to seven days.

You will be given a follow-up appointment in one to two weeks following surgery. You must attend this appointment.

Any improvement in vision will take place gradually, and it may be several months before the optimal visual outcome is achieved.

**If you develop a deep headache or throbbing pain that does not respond to over the counter painkillers, you should contact the Urgent Eye Clinic:**

- Monday - Friday: 9am to 7pm.
- Saturday: 9am to 12:30pm.
- Closed from Saturday after 12:30pm until Monday at 9am.
- Closed Bank Holidays - please attend your local A&E department.

### **Contact details:**

The Lister Treatment Centre  
Lister Hospital  
Coreys Mill Lane  
Stevenage  
Hertfordshire SG1 4AB

Telephone: 01438 288122 - Select Menu Option 4

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