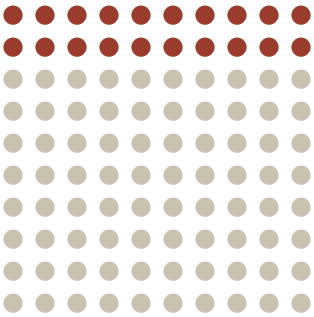
Information about a vitrectomy surgery for retinal detachment

You will have been directed here because you have a retinal detachment. Retinal detachment, left untreated, tends to progress so that the entire vision is lost. After some time this is irreversible.

Most retinal detachments are treated with vitrectomy surgery. Overall, about 80 in every 100 retinal detachment procedures like this are successful; in about 20 in every 100 the surgery fails and has to be repeated.

The main risks at a glance

Each grid below is 100 people who have the operation; the shaded dots are those affected.



About 20 in every 100 – the retina detaches again and a second operation is needed. About 80 in every 100 succeed at the first operation.

Vitrectomy is the surgical removal of the vitreous gel from the middle of the eye. During a vitrectomy, the surgeon inserts small instruments into the eye, cuts the vitreous gel, and removes it by suction. After removing the vitreous gel, the surgeon may treat the retina with a laser (photocoagulation) or freezing treatment (cryotherapy), remove lens material or intraocular lenses that are in the wrong position, cut or remove fibrous or scar tissue from the retina, flatten areas where the retina has become detached, or repair tears or holes in the retina or macula. At the end of the surgery, saline, air or a gas or silicone oil may be injected into the eye to replace the vitreous gel to restore normal volume to the eye.

There are some alternatives in some situations only, which include pneumatic retinopexy or a scleral buckling procedure for those patients who have certain types of retinal detachment. When surgery is done for a retinal detachment the visual result will depend on the extent of the detachment and absence of a secondary detachment later.

Vitrectomy is usually performed under local (no-needle injection) anaesthesia. General anaesthesia may be used instead in some cases. It is typically performed as a day case procedure. It is very rare for a hospital stay overnight to be needed.

There are some risks associated with anaesthesia, whether general or local. Complications of anaesthesia injections around the eye may include: perforation of the eyeball, injury to the optic nerve resulting in loss of vision, haemorrhage, retinal detachment, interference with retinal circulation resulting in possible vision loss, drooping of the upper eyelid,

hypotension or lowering of the blood pressure, and respiratory depression. General anaesthesia can result in heart and breathing problems, and, in very unusual and rare instances, death or diminished brain function can occur.

There is no guarantee that the surgery will improve your condition. Sometimes it doesn't work. In addition, surgery is risky. Sometimes it can make the problem worse, cause an injury, or create a new problem; if it does, this is called a complication. Complications can happen right away or not until days, months, or years later. You may need more treatment or surgery to treat the complications.

This document lists the major risks of vitrectomy surgery to help you decide whether you are ready to accept the risks. After vitrectomy surgery, you may have vision loss, blindness, loss of the eye, as well as bleeding, infection, and injury to the eye or nearby body parts. Other major risks can include (but are not limited to):

- Repeated retinal detachments that may require additional surgery or may be inoperable
- Elevated eye pressure (glaucoma)
- Poorly healing or non-healing corneal defects
- Corneal clouding and scarring
- Cataract, which might require eventual or immediate removal of the lens
- Clouding of certain types of lens implants, if you have already had cataract surgery, which might require eventual removal and sometimes replacement of the lens implant
- Double vision
- Eyelid droop
- Loss of circulation to vital tissues in the eye, resulting in decrease or loss of vision
- Phthisis (disfigurement and shrinkage of eyeball)
- Unexpected loss of central vision after use of silicone oil

With any eye operation including cataract surgery, there is always a very small risk to the other eye of causing inflammation. This is called sympathetic ophthalmia. This condition is unusual and can usually be treated with drops or sometimes tablets.

There are some restrictions when you have gas in your eye. Because the gas may expand you may not fly until the gas has gone. You should not lie flat on your back for long periods until the gas has gone. You should not have a general anaesthetic unless special precautions are taken until the gas has gone. It can take up to 12 weeks for the gas to go away. Once the gas has gone away there are no restrictions on activities whatsoever.

Whilst I have gone through lots of complications that can occur, most people who have this operation have no problems after surgery and most people who have this operation see better after surgery than they would do without surgery. If it does not work at the first attempt it is possible to try again. We do almost all of these operations under a local anaesthetic – awake.

After Surgery

You may be asked to put your head in a certain position – often face down – for the first hour or so after surgery. Usually after that you will be free to move and sleep

normally. Unless you have been specifically asked to assume a particular position there is no advantage – indeed it may be harmful – to keep a specific fixed position.

You will normally be seen about a week or two after the surgery, then again about 2 months after that. The first day after surgery you will be able to see movement and possibly count how many fingers you are holding up – if you hold your hand close to your face. If you bend over so that you are looking straight at the ground and then bring your hand within a few inches of your face you will probably be able to see details on your hand.

As the bubble slowly dissolves away you will start to be able to see through the top of your vision. By about six weeks the bubble will be bouncing around in the bottom half of your vision and you should start seeing over the top of it. By ten weeks the bubble will be a ball at the bottom of your vision and one day – it will be gone.

Things to look out for

In the first few days and again at two weeks or so pressure in the eye can be a problem. Pressure usually gives you a bad eye and brow ache and is treated with tablets or drops. If you have brow ache, don't ignore it – get in touch so we can treat it.

As the bubble gets smaller – and if you are unlucky – the retina can detach. This is seen as a grey shadow that covers part of the vision, usually starting at the bottom. Unlike the bubble, it doesn't move around as you tilt your head. If you think this might be happening, get in touch so we can have a look.

Pain

This operation and the period afterwards should not be painful. Do not expect pain and if you get pain, make a fuss!

Emergency contacts: https://www.vitygas.com/information/emergency-contacts/

NHS patients call Limpsfield Ward or the East Surrey Hospital switchboard. Private patients use the mobile number provided.