Vitrectomy surgery

Please note: this information is for my patients that I have advised to check my web-site. You are welcome to browse, but unless I have specifically directed you here, the information may not apply to you.

Vitrectomy surgery: general information

Please read this first if you are considering having a vitrectomy for any reason. It includes a fairly comprehensive list of the reasons you may be recommended to have a vitrectomy, and things that may go wrong. It is based on information from OMIC (a large American eye surgery insurance company) and reflects their experience of retinal surgery and the issues that arise – I have modified the language slightly (translated from American into English!) and removed some irrelevant information. At the bottom of the page are links to specific conditions: these contain more information about those conditions and what to expect with surgery.

Retinal surgeons treat some types of eye problems with a surgery called vitrectomy. This surgery is performed in the back part of your eye that contains the retina and the macula. It is filled with a gel called the vitreous. The vitreous is cut and removed using suction. Retinal surgeons may also perform a scleral buckle, which involves placing a flexible band around the white of the eye. The retinal surgeon then performs additional procedures as needed.

Your surgeon may recommend surgery for one or more of these reasons:

- Flatten the retina where it detached. The retinal surgeon may place a scleral buckle, heavy liquid (perfluorocarbon), gas bubble, or oil to help the retina stay attached.
- Treat the retina with a laser or freezing treatment (cryopexy).
- Remove blood from the vitreous.
- Remove epiretinal membranes, fibrous or scar tissue. The retinal surgeon may use a dye to see the tissue better.
- Repair tears or holes in the retina or macula.
- Address problems related to cataract or lens implant.

Alternatives (choices and options)

You can choose to have no treatment. You may risk permanent vision loss with no treatment.

Some retinal detachments can be treated with pneumatic retinopexy; gas is placed in the eye to flatten the retina.

At the end of the surgery, the retinal surgeon may inject air, gas, or silicone oil to replace the vitreous. If your retinal surgeon uses air or a gas bubble, you can't fly in an airplane, travel to high elevations or lie on your back for long periods (ordinary sleeping is fine), until the bubble is absorbed by your eye. If the retinal surgeon injects silicone oil, you will most likely eventually need surgery to remove it.

Benefits (how this surgery can help)

The goal of retinal surgery is to protect vision and stabilise your condition. Patients with vitreous haemorrhage may have better vision after the surgery. They may also have a lower risk of severe bleeding complications after the surgery.

Patients who have surgery to repair a retinal detachment may have better vision after the surgery. The improvement in the vision depends upon how big the detachment was. The retina can detach again. If it does, you will need another surgery to treat it.

Patients with a macular hole or epiretinal membrane may have better vision after the surgery.

There is no guarantee that your vision will improve after the vitrectomy. You may need another surgery or treatment for your condition.

Risks (problems the surgery can cause)

As with any surgical procedure, there are risks. The surgery may not improve your vision, even if it is properly performed. If you have a severe complication, you could lose vision or even the eye. Your surgeon cannot tell you about every risk. Here are some of the most common and serious risks:

- Infection
- Bleeding, or loss of blood flow to parts of the eye
- Retinal detachment with the need for another surgery to repair it
- Cataract, or clouding of the lens in your eye. You may need surgery to remove the cataract if it interferes with your vision.
- Elevated eye pressure (glaucoma)
- Damage to the cornea, the clear covering of your eye, that may not heal well. This damage may cause scarring or clouding, which causes poor vision.
- Double vision
- Eyelid droop
- Disfigurement and shrinkage of the eyeball (phthisis)
- A scleral buckle may cause the eye to become more nearsighted
- Silicone oil may cause damage to an intraocular lens implant. It may need to be removed or replaced.
- Silicone oil may cause permanent central vision loss.
- Perfluorocarbon, the heavy liquid placed in the eye to help flatten the retina, may cause floaters or blind spots. If the floaters interfere with your vision, you may need surgery to remove them.

Any eye surgery or trauma can give rise to a condition called sympathetic ophthalmia. In this condition the other eye can become inflamed. This may need treatment with drops or tablets; in some cases it can lead to loss of sight.

A complication may occur during the surgery, and the retinal surgeon may need to perform another surgery right away to treat it. The retinal surgeon may discover a new condition or problem for the first time during the surgery. The retinal surgeon may need to change the plan for surgery to treat this problem or condition right away.

Anaesthesia

Retinal surgery is usually performed under local or general anaesthesia. Local anaesthesia is infiltrated (usually using a technique that does not involve a sharp needle) around the eye to numb the eye and keep it from moving. Risks of regional anaesthesia include needle damage to the eyeball, eye muscles, or optic nerve, which could cause vision loss; interference with circulation of the retina, which could cause vision loss; drooping of eyelid, double vision, and bruising of the skin around the eyes.

An anaesthetist may also give you intravenous sedation to help you relax. Intravenous sedation can cause heart and breathing problems. Very rarely, it can cause death.

An anaesthetist can use gases and medication to "put you to sleep" during general anaesthesia. General anaesthesia can cause heart and breathing problems. Very rarely, it can cause death.

Below are links to specific information about your condition and surgery. You are welcome to browse, but it is better if you look at the information to which I have directed you otherwise it may get confusing.

- Floaters
- Epiretinal membranes
- Macular holes
- Large macular holes
- Lens exchange or removal after cataract surgery
- Retinal detachment
- Vitreomacular adhesion and traction (VMA / VMT)
- Taut posterior hyaloid face
- Vitrectomy and delamination
- Removal of retained lens fragments

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.