Vitrectomy

Vitrectomy is a surgical procedure to remove the vitreous jelly, a clear transparent jelly, from inside the eye. The vitreous jelly is situated behind the lens of the eye (which is located behind the iris, the coloured part of the eye) and in front of the retina, at the back of the eye.

Why is a Vitrectomy necessary?
A vitrectomy can treat a number of conditions, including:
- Certain macular degenerative conditions such as macular hole and epiretinal membranes;
- Retinal detachment;
- Diabetic eye conditions where blood vessels from the retina leak and bleed into the clear vitreous jelly, greatly reducing vision;
- Trauma, to removal of any foreign body lodged inside the eye in the vitreous jelly or retina;
- Biopsy purposes, usually for serious infections so that the source of infection can be identified and treated;
- Vitreomacular traction. This is an increasingly recognised condition and one which patients with age-related macular degeneration may well encounter.

How is the vitreous jelly removed?
Vitreous jelly is removed under either a local or general anaesthetic, using microsurgery. The procedure can take about an hour. Once the jelly is removed, further action can be taken as necessary, such as repairing a retinal detachment, treating leaking blood vessels, applying laser therapy or removing surface scar tissue.
Is the vitreous jelly replaced?
Vitreous jelly does not naturally replace itself and a number of substitutes are used:

- Saline (the most common substitute)
- Air (absorbed in 24–36 hours)
- Gas bubble (absorbed in 2–3 weeks)
- Transparent oil (this is not absorbed and is surgically removed at a later date)

The eye produces clear fluid called aqueous humor which, as the gas or air is absorbed, gradually fills the vitreous chamber.

After the operation
Following the procedure, your eye may be sensitive, swollen and red. This is normal and you will be given advice. You will be prescribed a combination of eye drops to prevent infection, reduce inflammation and rest the eye.

If gas or oil has been inserted into the eye, you may be advised to position yourself with your head tilted downwards. This is known as ‘posturing’ and your surgeon will advise you on how to do this and for how long. Equipment is available to help make posturing more comfortable. If not offered by your hospital, equipment can be hired from Face Down Support Hire, tel: 0845 017 0533. www.facedownsupporthire.com

Post-operative care
You will need to attend the eye clinic for assessment 1–2 weeks after surgery. Further appointments will normally be necessary.

If the removed vitreous jelly was replaced with a gas bubble, you are not allowed to fly while it is still present in the vitreous.