

## Vitreoretinal Surgery

Vitreoretinal surgery refers to operations to treat diseases of the retina, macula and vitreous.

The most common reasons for needing vitreoretinal surgery are:

- Retinal detachment;
- Epiretinal membrane;
- Macular hole; and
- Complications of diabetic eye disease.

### How is vitreoretinal surgery performed?

Most surgery involves a procedure called a vitrectomy. This is a form of keyhole surgery which is carried out in a specially equipped operating theatre.

The operation is performed using an operating microscope to allow the surgeon to see at high magnification. Three small incisions are made into the white of the eye – these are each just 1 mm in size. The incisions allow very fine instruments to be passed into the back of the eye.

The cavity of the eye is filled with a jelly-like substance called vitreous. This is removed with a suction cutter, and you will hear a rapid clicking or buzzing noise while this is being used.

The other steps of the operation depend on the reason it is being performed, but may include:

- Peeling membranes from the surface of the retina with fine forceps;
- Laser or freezing treatment to the retina; and
- Insertion of a bubble of gas or silicone oil into the eye.

### How long does the operation take?

It depends on why it is being performed, but it may take as little as 30 minutes for a simple procedure, up to 2 hours for something complex. 45 minutes to an hour is typical for most routine operations.

## **What anaesthetic is required?**

Most operations can be done with local anaesthetic, meaning that you will be awake for the operation. The eye is numb so that you won't feel any discomfort, or see anything upsetting, and the other eye is covered up.

Under local anaesthetic many people also have sedation. This is medicine administered into a vein by an anaesthetist to make you feel more relaxed. With sedation you usually remain awake during the operation, but you may not remember much about it.

Some operations can only be done with you fully asleep under general anaesthesia, or you may simply prefer this.

The final decision will be made with you, in discussion with the surgeon and anaesthetist, depending on the reason for the operation, your preferences and your general health.

## **What can I expect afterwards?**

Vitrectomy surgery is not usually painful, but you can take simple painkillers such as paracetamol or ibuprofen if needed.

You will be prescribed eye drops to help the eye settled down, and these often continue for about 4 weeks after the operation.

If you have a gas bubble inserted into the eye then your vision will be quite poor for a few weeks and you may be asked to do posturing.

Your eye specialist will give you specific instructions, but please ask if you are unsure.

## **Will I need to take time off work?**

Most people will need at one to two weeks off work after surgery. The amount of time off work will depend on the kind of work you do and the kind of surgery that is done. This will need to be discussed with your surgeon.

## **What are the risks and complications?**

The risks and complications of the surgery depend on what is wrong with the eye and the operation required. Your eye specialist will discuss this with you.