Vitrectomy Surgery Information

We have booked you for vitrectomy surgery. Below is some important information regarding vitrectomy surgery, what to expect and what to look out for. Also included are details on the procedure to be performed and the hospital location, as well as your fee estimate. You will either have already or will soon receive a confirmation of the date for your vitrectomy surgery.

I look forward to taking good care of you on the day and beyond.

Please Read This Carefully

Vitrectomy is an ever more commonly performed surgical procedure to deal with certain disorders of the vitreous and retina. Vitreoretinal surgeons are subspecialist, highly trained and skilled eye surgeons who perform vitrectomy surgery for conditions including retinal detachment, epiretinal membrane, macular hole, vitreomacular traction, vitreous hemorrhage, proliferative diabetic retinopathy and complex ocular trauma.

There is an abundance of information available online including on the Royal Australian and New Zealand College of Ophthalmologists website (see below):

https://ranzco.edu/ophthalmology-and-eye-health/eye-conditions

Vitrectomy surgery is a relatively new intraocular eye surgical procedure and great advances the technology available for surgeons have been made in more recent times. The surgery involves placing three small ports through the white part of the eye called the sclera. This
allows access to the posterior segment of the eye where the vitreous and retina are located. Surgery usually involves removal of the vitreous jelly which will be replaced by natural fluid produced by the eye. Sometimes for a short period of time, a gas bubble will be placed in the eye and this would blur your vision until the gas bubble disappears. Even less commonly oil is required to be placed in the posterior segment of the eye to replace the vitreous and secure the retina. The steps taken during surgery and the agents used all depend on the complexity of the surgery and the pathology involved. I will discuss all of this with you preoperatively during the consultation.

I will provide you with information relating to the specific eye condition we are performing vitrectomy surgery on you for including the potential complications and expected outcomes. In general, however, there are some common things to know about vitrectomy surgery which relate to all patients.

Vitrectomy surgery is a day procedure performed under local anesthetic or general anesthetic depending on the case. Your anaesthetist will discuss all of this with you on the day and I will have discussed it with you in consultation in rooms prior to surgery. If local eye anesthetic is to be used it will be administered by your anaesthetist, often after some light sedation to help with comfort. Either a small needle or cannula is placed behind the eye to deposit a small amount of local anesthetic. This will block eye movements and pain in the majority of cases allowing minimal to no discomfort during the procedure. Some people will report still seeing some lights whereas others will report not seeing anything at all during the surgery. This is partially dependent on how the anesthetic works in the individual in question.

The vitrectomy surgery itself generally takes between anywhere from 30 to 90 minutes depending on the type of procedure and particular condition involved. Your eye will be sterilized and draped. There will be plenty of oxygen under the drape although if you do suffer from claustrophobia please mention this beforehand so we can assist as needed. Most patients find the surgical procedure very tolerable and often comment "that was much easier than expected". After surgery, the eye is protected with some antibiotic ointment, an eye pad and an eye shield, which is taped to the face. The dressing is generally left on until your next day post-operative appointment.

**What drops are used after surgery?**

1. **Prednefrin Forte**: 1 drop every hour for first day (after eyepad off), then 4 times/day (breakfast, lunch dinner, bed) for 4 weeks after surgery
2. **Ocuflox**: 1 drop 4 times/day (breakfast, lunch, dinner, bed) for 1 week after surgery

Always use fresh bottles for newly operated eyes. If you are on any other eye drops, for example for glaucoma, these can continue from the day after surgery, however, a fresh bottle will need to be used. Sequential drops should be spaced 3-5 minutes apart.
Generally, I arrange a next-day postoperative follow-up, however, this can vary depending on the individual case. The second postoperative review is routinely either at two weeks or at one month, again depending on the individual case.

How to manage your own regular medications?

You can continue all regular medications as usual with some exceptions:

1. **Warfarin**: INR required within 3 days of surgery
2. **Diabetic medications**: Insulin dose to be discussed with anaesthesist. Tablet medications to be omitted the morning of surgery.

Take other regular medications with a sip of water on the day of surgery.

How should your eye feel after vitrectomy surgery?

If a gas bubble [or air bubble] is inserted into the eye at the end of the case then vision will be blurry once you take off the dressing. Until the gas bubble clears the vision will remain blurry. Don't panic this is to be expected. Once the anesthetic wears off there may be some ocular surface irritation related to the surgical procedure itself and potentially from small sutures used to seal the wounds at the end of the case. These sutures usually take about 2 to 3 weeks to dissolve. For most people, this surface irritation is tolerable and can be managed with the postoperative drops and possibly some additional lubricant drops. For some, there is the persistence of irritation and dry eye symptoms and this can last for weeks to months. Many of these patients have and often undiagnosed pre-existing blepharitis [a very common eyelid inflammatory condition]. I will advise you during consultation about this condition, should you have it, and provide advice on how to optimize your eyes before surgery.

Occasionally patients will experience irritation or allergy related to the drops or the preservatives in the bottles.

What should I be looking out for after vitrectomy surgery?

The most important thing to prevent, and recognize early should it happen, is a postoperative intraocular eye infection, called endophthalmitis. Thankfully this is uncommon with rates reported anywhere from approximately 0.1% to 0.02%. Prompt recognition and treatment are required to prevent poor outcomes which include blindness. Treatment is with urgent
injections of antibiotics into the eye. Symptoms include pain, sensitivity to light, increase redness and decreased vision. The most important thing is to call me immediately on my mobile phone [0400099722] to arrange a prompt review. Should I be unavailable then you should present to the public emergency department at Canberra Hospital in Garran.

Other complications that can happen in the postoperative period include raised intraocular pressure [blurred vision, halos, eye pain, headache, nausea], low intraocular pressure [decreased vision], vitreous hemorrhage [floaters, loss of vision] and retinal (re)detachment [flashers, floaters, shadows, decreased vision]. Again, early contact with me or my staff to arrange a review is the most important thing to remember.

For those who have a gas bubble in the eye postoperatively, they should be aware that the edge of the gas bubble will lower as the gas bubble becomes smaller. Once it progresses beyond halfway your vision will hopefully improve. As the gas bubble becomes smaller, being aware of any other shadows appearing in your vision is important as they may indicate a retinal detachment or redetachment. The gas bubble will be present in the eye for anywhere from 2 to 8 weeks. If oil is placed in the eye it may be present indefinitely but is often removed at approximately 3 to 6 months.

As would've been mentioned in consultation for those who have not had cataract surgery, vitrectomy surgery in many cases induces the onset of cataract within 1 to 2 years. What you will notice is that your vision will hopefully improve after the vitrectomy surgery however, once the cataract develops your vision will become blurry.

What way do I need to posture after vitrectomy surgery?

When you have a gas, bubble placed in the eye to secure the retina, particularly after retinal detachment or macular hole surgery, I may ask you to perform head posturing for up to several days to optimize the surgical outcome and give you the best chance of recovering your vision. This will be discussed with you preoperatively, and again at the end of surgery before you leave to go home.

What can I do or not to after vitrectomy surgery?

The most important thing to remember is that we make some small incisions in the eye to access the vitreous cavity and in most cases, do not use sutures as a watertight wound can be created with quick healing without the need for suturing. Therefore, rubbing the eye is to be avoided as it may open the wound allowing bacteria and other pathogens access to the eye. Also rubbing of the eye may allow the release of gas which is necessary to keep the retina
secure. Good hand hygiene is also very important as well as keeping the drops at an appropriate temperature and cleanliness. Never wipe your eye with a hanky, nor wipe your eye after petting animals, going to the toilet or gardening. I generally recommend you do not go swimming for one week. Should you want to take a shower, minimize water entering the eye. This can be achieved by directing the head of the shower away from the face. Flying is contraindicated after vitrectomy surgery if a gas or air bubble has been put in the eye. A wristband will be provided to identify to you and others that you have a gas bubble in your eyes. If you plan on travelling to altitudes greater than 1000 m it is important to discuss this with me preoperatively before discharge. Travelling to areas of high elevation could potentially cause any gas bubble to expand and raise the pressure inside the eye. This could potentially cause pain, headache, nausea and loss of vision due to occlusion of the blood supply to the eye. Travelling to lower ground quickly will help relieve the symptoms. I recommend light activity during the first week after vitrectomy surgery and avoid any activity that may cause direct trauma to the eye itself. For those who play contact sports or for example tennis or squash, I would recommend refraining from these activities for up to 4 to 6 weeks postoperatively. Any other questions that you may have that I have not answered here be sure to ask me as I'll be more than happy to advise.

**EMERGENCIES: DR RICHARD BARRY - 0400099722**

Note: payment for elective surgery will be requested within a week of the scheduled date.