

## Operation Information

### Pars Plana Vitrectomy

#### Introduction

Vitreous humour (Vitreous body) is the clear jelly-like substance that fills the space between the lens and the retina of the eyeball. Pars Plana Vitrectomy is used to treat various kinds of vitreoretinal disorders such as diabetic retinopathy, retinal detachments, macular hole, and removal of lens fragments etc. This is a microsurgical procedure to remove the vitreous humour and replace it with substitutes such as a special saline solution, gas or silicone oil.

#### Outcomes

The expected outcome of this procedure is determined on different indications. This operation may significant help to improve the vision of the affected eye by replaced the problem of vitreous humour.

#### Procedures

1. The operation can be performed under local or general anaesthesia.
2. The doctor will make small incisions in the sclera (the white of the eye) and place fine surgical instruments into it.
3. Vitreous jelly, blood, scarred tissue and fibrous membranes etc. are then removed through the small incision wound.
4. Special silicone rubber or sponge may be used for the repair of retinal detachment.
5. Either intraocular gases or silicone oil may be used to flatten and support the detached retina towards the wall of the eye and keep it in place to allow time for healing. Intraocular gas will be absorbed by itself in a few days to weeks while a second operation may be required to remove silicon oil when the retinal condition is stable.
6. Laser or cryotherapy may be used during surgery to seal any breaks in order to prevent bleeding. This may also be used for retinal ablation in advanced diabetic retinopathy.
7. The whole procedure may take about 1-2 hours depending on the complexity of the case and if any combined procedure such as scleral bucking and lens removal is performed.

#### Possible Risks and Complications

1. Infection
2. Retinal detachment
3. Vitreous haemorrhage
4. Glaucoma (buildup of pressure within the eye)
5. Development of cataract
6. Distorted vision
7. Blindness
8. May have other complications related to specialized equipment used during operation
9. Post op may have transient raised ocular pressure

\*\* The risks listed above are in general terms and the possibility of complications is not exhaustive. Please understand that even though all operations are carried out with utmost professionalism and care this does not rule out the possibility of complications arising. In the event of peripheral organ damage or post-operative haemorrhage or leakage, further operations may be required.

## **Pre-operative Preparations**

1. Good hygiene can prevent surgical wound infection. Therefore, we advise you to clean up yourself on the day of operation.
2. The procedure and possible complications will be explained by the doctor and a consent form must be signed prior to the operation.
3. Please inform the doctor and nurse all your past medical history, previous surgical operations, current medication and any complication with drug or anaesthesia. Please inform doctor if you are taking medications that affect blood coagulation, such as Aspirin, Warfarin, Xarelto or Pradaxa and Chinese medication.
4. Blood tests, chest x-ray are usually required to prepare for general anaesthesia.
5. No food or drink six hours before operation. (For general anaesthesia only)
6. Please change into a surgical gown after removing all belongings including undergarments, dentures, jewelry and contact lenses.
7. Please empty your bladder before the operation.

## **Post-operative Instructions**

### **General**

1. After general anaesthesia, you may:
  - experience discomfort in the throat after tracheal intubation.
  - experience side effects of anesthesia including feel tired, drowsy, nausea or vomiting. Inform the nurse if symptoms persist or worsen.
2. You may have swollen eyelids, eye redness and experience sensitivity or mild pain on the operated eye.
3. You may experience tearing and a rubbing feeling on the outside of the eye, this is usually due to the sutures which should dissolve after 2 weeks.
4. Vision may remain blurred during the early postoperative period. Since most of the vitreoretinal diseases are usually severe, full recovery of vision may not be possible.
5. If gas or oil has been injected into the eye, you will be advised to maintain a face-down position or lie prone, this posture is important for recovery and success of the operation.
6. Apply eye drop and eye ointment as prescribed by doctor.

### **Wound Care**

1. An eye patch will be applied in order to protect the eye. Please keep the wound clean and dry.
2. You are advised to wear a plastic eye shield to prevent rubbing of the operated eye or bumping into any objects especially during sleep.
3. Wear clothes with buttons rather than pullovers to prevent contact with the affected eye.
4. Do not rub your eyes.

### **Diet**

A normal diet may be resumed as instructed after recovery from anaesthesia.

### **Activities**

1. Showering is allowed however avoid getting water in the eye for two weeks.
2. Hair washing should be avoided for the first week
3. Heavy lifting or doing any activities that strain the body should be avoided.

## **Advices on Discharge**

1. The prescription pain medication and instill eye drop or apply eye ointment may be taken as needed.
2. Maintain a face-down position or lie on prone position for a certain period of time as advised by the doctor.
3. It is advised to leave some lighting when you go to toilet at night to avoid falls.

4. Getting water, soap or shampoo into the operated eye should be avoided.
5. Strenuous activity or heavy lifting should be avoided until the doctor allows you to resume normal activities.
6. Do not travel in aeroplane or go to high attitude when gas is injected inside the eyeball, wait until it is completely absorbed as advised by doctor. It is because the reduced atmospheric pressure causes the gas bubbles to expand, raising the pressure in the eye to a dangerous level.
7. Immediately consult your doctor or return to hospital for professional attention in the event of severe wound pain associated with redness and swelling, tenderness, secretion of pus or blood seepage, shivering, high fever over 38°C or 100°F, or any other unusual symptoms etc.
8. Any follow-up consultations should be attended as scheduled.

Should there be any enquiries or concerns, please consult the attending doctor.

Under the professional care of the doctor, you will gradually recover. We wish you all the best during your treatment and recovery.

If you have any questions after reading the entire leaflet, please write them down in the spaces provided in order for the doctor to further follow-up.

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Compiled by Union Hospital Operating Theatre (OT) Governance Committee

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