

Vitrectomy Surgery

This material will help you understand your vitrectomy surgery and what you can expect.

What is a vitrectomy?

A vitrectomy is the removal of the **vitreous** (vit-ree-us) gel that fills the back of the eye. A vitrectomy can treat a number of eye conditions that affect your vision. These include blood leaks (vitreous hemorrhage), infections (endophthalmitis), and large floaters. A vitrectomy is also used as the first step during surgery for treating other eye diseases, such as diabetic retinopathy, macular holes, and retinal detachments. Sometimes the doctor may use a vitreous sample from a vitrectomy to help diagnose certain infections and cancers in the eye. Although the doctor removes the vitreous during surgery, it is replaced by a salt water liquid just like the natural liquids in your eye.

What should I expect before my surgery?

Before surgery, you will be contacted by the nurse in the pre op clinic to discuss your medical history. S/he will set up an appointment for you to have a physical exam. This is so the anesthesia team can clear you before your surgery. You may need to have an electrocardiogram (EKG) for your heart and some blood work as well. Your doctor will help you decide whether local (awake, but numb) or general (asleep) anesthesia will be used for your procedure.

The pre op nurse will call you a few days before your surgery to give you your arrival time. The nurse will go over any questions you may have, and tell you what time you will need to stop eating and drinking to prepare for surgery. The nurse will also let you know if you should not take any of your regular morning

medications. Unless the nurse tells you not to take one or more of your morning medications, you should take all of your regular morning medications with small sips of water, but without anything to eat.

Be sure to arrange for a responsible adult to come with you, stay during surgery, and take you home. You cannot drive for 24 hours after surgery because of the anesthesia.

What should I expect the day of my vitrectomy surgery?

On the day of the surgery you will go to the 4th floor of the Kellogg Eye Center (Brehm Tower) to check in. You will meet your nurses, anesthesiologists, and operating room team. Once you are prepped for surgery, we will take you back to the operating room and lie you down flat. If you are undergoing local anesthesia, the anesthesiologist will give you relaxing medicines through your IV, and a doctor will numb the eye. The surgery usually takes 1-2 hours, but it may last longer in certain situations. The procedure is usually performed as an outpatient surgery, which means that you will be able to go home the same day.

During the surgery, the doctor makes tiny cuts into the sclera (the white part of your eye). S/he will then place vitrectomy tools through these cuts to remove the vitreous gel. Depending on your condition, the doctor may also perform more procedures to help restore or retain your vision. These may include removing scar tissue, fixing retinal tears or detachment, laser repair, or removing foreign objects in the eye.

At the end of the surgery, the doctor may insert a gas bubble or silicone oil into the eye to allow the retina to heal and restore eye pressure. If gas is used, you will be asked to keep your head in a specific position. The gas will go away in weeks to months, and the eye will fill with the body's own salt water solution.

If silicone oil is used, the doctor will need to remove this later with another surgery.

Once the surgery has ended, a shield is placed over your eye to protect it until you come in for your visit the following day. Lastly, you will be brought to the recovery area where the nurses will check your vital signs and get you something to eat and drink. They will check the pressure of your eye before you go home.

Are there any serious complications related to vitrectomy surgery?

With any surgery, there is a chance of a complication. Many of these will be discussed by your doctor when s/he talks with you about consenting to surgery. Some of the more serious complications of vitrectomy include infection, bleeding, and detachment of the retina. These may be treated if caught early. Call your eye doctor right away if you have any of these symptoms (or any others that worry you):

- Increased pain not helped by Tylenol® (Acetaminophen)
- Change in vision
- Any redness or swelling around the eye gets worse

If you call the clinic after clinic hours, you will be told how to get in touch with the eye doctor on call. There is an eye doctor on call every day of the year.

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