Vitrectomy

What is it?

Vitrectomy (vi-TREK-tuh-mee) is surgery to treat problems with the vitreous (VI-tree-uhs) and the retina. The vitreous is the clear, gel-like fluid that fills the middle of the eye. The retina (RET-n-uh) is the light-sensing layer of tissue at the back of the inner eye. In a vitrectomy, the vitreous is removed. It is usually replaced with saline (salt solution).

Why do I need it?

For you to see, light needs to pass through the vitreous to the retina. Sometimes light can't pass through because the vitreous is clouded by blood, inflammation (swelling), or infection, and sometimes the retina may be damaged. Removing the vitreous can clear up these problems, or give your doctor better access to repair the retina.

Your doctor may recommend vitrectomy if you have a condition that is damaging your vision, such as:

- Diabetic retinopathy — damage to the retina caused by diabetes, which can cause blurred vision, gradual vision loss, or floaters.
- Retinal detachment, in which the lining of the eye peels loose and floats freely within the eye.
- Bleeding in the eye that does not clear on its own.
- A severe eye injury.
- A tear in the retina or wrinkle in the retina.
- Certain problems after cataract surgery.

Possible benefits

- Restore, preserve, or enhance vision
- Decrease risk of bleeding in the eye
- Prevent further detachment of the retina
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- Prevent further detachment of the retina

Risks and possible complications

- Risks associated with any surgery can include infection, bleeding, reaction to anesthesia, and surgical site pain.
- Risks with vitrectomy, such as:
  - Bleeding
  - Infection in the eye
  - Retinal detachment
  - High pressure in the eye
- Scar tissue
- Cataract
- Fluid buildup in the clear covering of the eye

Alternatives

Depending on your condition, alternatives may include:

- Watching and waiting
- Another procedure such as scleral buckle surgery or laser photocoagulation

Talking with your doctor

The table below lists the most common possible benefits, risks, and alternatives for vitrectomy. There may be other benefits or risks in your unique medical situation. Talking with your doctor is the most important part of learning about these risks and benefits. If you have questions, be sure to ask.
How much will my vision improve?

It depends on whether your eye problem caused permanent damage to your retina before the vitrectomy. Your doctor will discuss your unique situation with you and explain how much improvement you should expect.

How is it done?

Vitrectomy is done by an ophthalmologist, a doctor specializing in diseases and surgeries of the eye. The surgery can last from one to several hours. Most patients go home the day of surgery, but a few stay overnight.

Your surgery will include the following:

- **Anesthesia.** You may be given local anesthesia to block feeling in the area of the surgery. Or, you may be given general anesthesia to block feeling in your whole body and make you sleep. Either way, you will not feel pain and will not be able to see the surgery.

- **Removing the vitreous gel.** The surgeon will insert very small instruments into the eye to suction out the vitreous gel and replace it with saline.

- **Treating the condition.** In some cases, the surgeon will do another procedure to treat the condition causing your problems. This may include repairing a detached or torn retina, removing scar tissue, or placing air, gas, or silicone oil in the eye to help the retina stay in position.

When should I call my doctor?

Call your doctor if you have any of the following symptoms:

- Increasing pain
- Sudden worsening of vision
- Increasing redness, or swelling around your eye
- A large increase in discharge from your eye
- New floaters, flashes of light, or changes to your vision

How do I care for myself at home?

**Pain management.** After surgery, expect to have some pain and discomfort. Your doctor will recommend a pain medicine. Take your pain medicine as directed. Pain is easier to control if you treat it early.

**Eye care.** Your eye will be covered with a patch and shield for a short time after surgery. Your doctor will remove them at a follow-up appointment.

- Your doctor will recommend eye drops for you to use for several weeks.
- You may have a small amount of discharge from your eye, especially after sleeping. Gently wipe it away with a damp cloth, avoiding any pressure on the eye.
- Avoid getting water in your eye. In the shower, wear your eye shield and stand with your back to the water.
- Protect your eye from injury at all times. Do not bump, rub, or squeeze your eyelid for 2 weeks.
- Complete recovery from vitrectomy can take up to 6 months. Talk with your surgeon about where you are in your recovery before you get a new prescription for glasses.

**Activity.** Take it easy for the first few days after surgery. Ask your doctor when you can return to normal activity.

- Avoid any activity that is a strain for you, such as lifting or pushing.
- Do not drive until your doctor says it’s okay.
- If gas was used in your eye:
  - You may need to keep your head in a certain position until the gas is gone. If you need to lie face down, special equipment can be rented to make this more comfortable.
  - Do NOT fly in an airplane or travel to a high altitude until the gas is gone. The gas can expand and cause pain and damage to your eye.