

Vitrectomy

What is a vitrectomy?

Vitrectomy is the surgical removal of the vitreous gel from the middle of the eye.

This procedure may be done for several reasons. To remove scar tissue membranes from the retinal surface, to repair macular holes, to repair retinal detachments, to remove vitreous hemorrhage, as well as other less frequent indications.

Patients with diabetes are particularly prone to retina problems for which a vitrectomy may be recommended (to remove blood in the vitreous gel caused by abnormal vessel growth and vessel hemorrhage).

During a vitrectomy, the surgeon inserts small instruments into the eye, cuts the vitreous gel, and removes it by suction. After removing the vitreous gel, the surgeon may treat the retina with a laser (photocoagulation), cut or remove fibrous or scar tissue from the retina, flatten areas where the retina has become detached, or repair tears or holes in the retina or macula.

At the end of the surgery, saline, air or a gas (perfluoropropane), or silicone oil may be injected into the eye to replace the vitreous gel to restore normal pressure in the eye.

What can I expect afterwards?

Vitrectomy has been shown to improve visual acuity in many people who have severe vitreous hemorrhage that has not cleared on its own. A vitrectomy can decrease the risk of severe bleeding complications in people who have begun to have bleeding into the vitreous gel. It can also reduce the risk of severe bleeding into the eye in people with growth of abnormal blood vessels in the iris. If the surgery is being done for a retinal detachment the visual result will depend on the extent of

the detachment and absence of a secondary detachment later.

What type of anesthesia is used?

A Vitrectomy is performed under local (injection) or anesthesia, with sedation. General anesthesia may be used instead in some cases. It is typically performed as an outpatient procedure. In some cases a hospital stay overnight may be required.

There are some risks associated with anesthesia, whether general or local. Complications of anesthesia injections around the eye may include: perforation of the eyeball, injury to the optic nerve resulting in loss of vision, hemorrhage, retinal detachment, interference with retinal circulation resulting in possible vision loss, drooping of the upper eyelid, hypotension or lowering of the blood pressure, and respiratory depression. General anesthesia can result in heart and breathing problems, and in a very unusual and rare instances, death or diminished brain function can occur.

What Are the Risks of the Surgery?

There is no guarantee that the surgery will improve your condition. Sometimes it doesn't work. In addition, surgery is risky. Sometimes it can make the problem worse, cause an injury, or create a new problem; if it does, this is called a complication. Complications can happen right away or not until days, months, or years later. You may need more treatment or surgery to treat the complications.

The surgical consent lists the major risks of vitrectomy surgery to help you decide whether you are ready to accept the risks. After vitrectomy surgery, you may have vision loss, blindness, loss of the eye, as well as bleeding, infection, and injury to the eye or nearby body parts.