Health Facts for you

Glaucoma Surgery (Trabeculectomy)

Why is a trabeculectomy done?

This type of surgery is used to treat glaucoma to lower the pressure in the eye. Often, this is done when medicines and laser treatments have not lowered your eye pressure to a safe level. If the pressure remains too high, it can cause permanent damage the optic nerve and your vision.

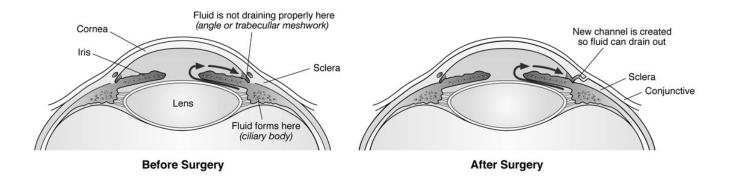
How is this surgery done?

We make a small opening in the white sclera of the eye to help fluid drain from the inside of the eye. This hole is covered by a thin tissue, the conjunctiva. When the fluid flows through this hole, it collects under the conjunctiva and forms a bleb or small blister. The fluid in the bleb is slowly absorbed by the body. Doctors look for the height and shape of the bleb to be sure that the fluid is draining the way it should.

Will this work?

Glaucoma surgery lowers eye pressure to safe levels in about 80-85% of patients. Over time, your body may try to close the new hole with scar tissue. Sometimes we use medicines during or after the surgery to try to prevent scar tissue from forming. The doctor will work with you to decide if you need this. This will depend on your age, if you have had a prior eye surgery, and what type of glaucoma you have.

After five years, about 50% of patients still have eye pressures low enough that they do not need glaucoma medicines. About 25% will need to use medicines, and 25% of eyes fail to lower pressure enough even with medicine. We can prevent further loss of vision 65-90% of the time.



What are the risks?

The most common risks of surgery are that the new drain works too little or too well. If the drain works too little, the pressure in the eye remains too high and you need medicines to lower the pressure. You will need to visit your doctor often to adjust your medicines. Your doctor can also push on your eye and cut or remove stitches to avoid a rise in pressure.

If the new drain works too well, fluid may build up behind the inner lining of the eye (retina) and may cause short-term vision loss. You may need a second surgery to drain the fluid and refill the eye to its correct shape.

After the surgery, your vision may decrease for a short time. In rare cases, loss of vision may be permanent. There is a very rare risk of losing your eye or dying during surgery.

How do I get ready?

To be sure that you are healthy enough for the surgery, you will have a work-up visit with your primary care provider. You will have a brief exam, blood tests, and maybe an EKG (heart tracing) or chest x-ray.

To prevent bleeding, you should stop taking aspirin, blood thinners, ibuprofen, anti-inflammatory arthritis medicines, or cold products with ibuprofen or aspirin one week before the surgery. If you take these or other blood thinners for health reasons, check with your doctor before stopping them.

A nurse will call you the day before surgery to tell you what time to arrive and give you eating and drinking instructions.

What can I expect the day of surgery?

Plan to go home the same day. When you arrive, we will start an IV. We will give you medicines to help you relax and we will put drops in your eye. We will numb your eye and the area around it so you won't feel pain.

We will clean your eye and put a cover over your face to keep the area sterile. The surgeon pushes back the conjunctiva, the thin outer layer of the eye. The surgeon then makes a three-sided square cut through half of the layers of the white of the eye, lifts the flap up and makes a hole under the flap. The surgeon will gently put the flap back down over the hole and will use two or more stitches to hold it in place.





The surgeon places the conjunctiva back over the flap. The fluid trickles out of the hole under the flap and collects under the conjunctiva to form the bleb. The surgery will take about 1 ½ hours. We will place a patch and shield or just a shield over the eye to protect it. You can go home once we take out your IV and you feel well enough to leave. This will be about 2 hours after the surgery.

What do I do after I go home?

Leave the patch and shield in place for the first day and night. We will check the eye the next day and at follow-up visits over the next few weeks. We will give you medicine to help your eye heal and to prevent swelling and infection. You should not take any of the glaucoma medicines that you were taking before the surgery in the eye that had surgery. Keep using any medicines you may have been taking in the other eye.

Wear glasses or the eye shield at all times for the first few weeks. Wear the eye shield at night to protect the eye. Do not do anything which makes you strain and hold your breath. Avoid lifting over 10 pounds. Do not bend over from the waist. If you need to pick up something, bend at the knees. You may resume sex when you feel ready. Be careful the first few weeks.

When to Call

- A sudden loss of vision
- Increased pain or discharge in the eye
- A large increase in redness or swelling
- Nausea or vomiting
- If you have questions or concerns

Who to Call

University Station Eye Clinic, 8 am to 4:30 pm, Monday through Friday: (608) 263-7171.

When the clinic is closed, your call will be sent to the paging operator. Ask for the "eye resident on call." Give your name and number with area code. The doctor will call you back.

The toll-free number is: **1-800-323-8942.** Ask to be transferred to the above number.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 1/2020 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4588