

Trabeculectomy with Anti-Metabolite

This material will help you understand the basics of your trabeculectomy surgery.

What is trabeculectomy?

Trabeculectomy surgery is one of the main surgeries used to treat glaucoma. Surgery is usually the treatment when medicines do not control your eye pressure. Your trabeculectomy will create an opening for fluid to drain from your eye. The fluid will drain into a small reservoir that your surgeon creates underneath your eyelid called the “bleb.” This allows the fluid to drain out of your eye through your bleb instead of draining through your eye’s natural drain. In glaucoma, the eye’s natural drain does not work very well. This surgery helps bypass the natural drain and lower the eye pressure.

What should I expect before I have my trabeculectomy?

The operating room nurse will call to give you your arrival time and provide you with instructions about your medications. The nurse will also go over any questions you may have. You will be told what time to stop eating and drinking to prepare for surgery. You will not be able to drive for 24 hours after surgery because of the anesthesia you will receive during surgery. Be sure to arrange a responsible adult to come with you, stay during surgery, and go back home with you.

What should I expect on the day of my trabeculectomy?

On the day of your treatment, you will arrive at the Kellogg Eye Center and check in on the 4th floor. You will change out of your comfortable clothes into a patient gown. You will meet your nurses, anesthesiologist, and operating room

team. The anesthesiologist will go over your anesthesia plan. You will have an IV placed so that you can receive relaxing and pain medications throughout your surgery.

Once surgery starts, your eye doctor will numb your eye. S/he will create an opening in the conjunctiva, or the skin of the eye. S/he will then create a small partial opening in the sclera. (The sclera is the white part of the eye.) This opening will create a drain for the fluid to exit from the eye. Your eye doctor may use an anti-scarring medication to help keep this newly formed drain open. S/he will then sew the conjunctiva shut over the newly formed drain. As fluid drains from the opening, a bubble forms over the opening underneath the skin of the eye. This is called a bleb. Your bleb is situated underneath your eyelid and your eyelid will help protect it from injury. Following surgery, your eye doctor will look at the bleb to make sure it is draining fluid well and is not leaking.

What will I need to do after my trabeculectomy?

After surgery, your eye doctor will patch your eye and put a hard shield over it to protect it. You need to keep this patch and shield on overnight. Your doctor will remove this patch and shield when you come to clinic the first day after your surgery.

It is important to use the medication your doctor gives you. The eye drops will help to ease your pain and calm the inflammation from the surgery. The anti-inflammatory drops will keep your new drain from scarring shut. Your body's natural healing response would cause the surgery to "heal" too quickly and scar shut. Since your body's natural tendency is to scar any cut, you have to use the anti-inflammatory drops to prevent this. You will be on your anti-inflammatory eye drops for at least 2 months after your surgery.

You will also need to protect your new bleb when you are sleeping. To prevent you from damaging it on your pillow, you will need to wear your shield at night for at least a month. (Often, the shield is worn much longer after your surgery.) Your doctor will tell you when you no longer need to wear your shield.

For at least one month after surgery, you will not be able to do activities that put pressure on your eye. These activities include:

- Bend with your head below your knees
- Lift anything heavier than 5 pounds
- Strain in any way, and
- Do serious exercise

Your eye takes about one month for the bleb to heal enough that it is safe to put small amounts of pressure on it. It may take your eye closer to 2 months to heal enough to participate in these activities. Your doctor will tell you when it is safe to resume your normal activities based on how you are healing.

You will see your eye doctor almost every week for about 2 months following your trabeculectomy surgery. Your vision will be blurry during this healing process. You cannot get new glasses until your eye has had a chance to heal. That is because the prescription changes as the eye heals more. About 2 months after surgery, we will measure you for new glasses to help correct your vision.

After you have had a trabeculectomy, your bleb becomes your body's connection to the outside world. Instead of having the fluid of your eye drain internally as it would normally do, it is draining into your bleb on the outside of your eye. This leaves you susceptible to infection. If at any time after your surgery your vision gets worse, you develop pain in the eye or your eye turns red, you need to come in to see your eye doctor right away.

If we catch an infection of the bleb early, it can be treated without any vision loss. If an infection of the bleb is not treated early, it can spread to the whole eye, causing serious vision loss. To help prevent infection after a trabeculectomy, you should avoid wearing contact lenses and swimming in natural waters like lakes and oceans. You can swim in pools but you must wear big goggles – the kind that people wear for snorkeling. Regular swimming goggles put too much pressure around the eye, right where the bleb is.

If at any time you feel like your eye is tearing uncontrollably, that is very concerning. It is possible that your bleb has “sprung a leak.” You will need to come in to see your eye doctor right away. If the bleb is leaking, you are at higher risk for infection. Early treatment helps prevent infections.

Are there complications after having the trabeculectomy treatment?

Your doctor will discuss all of the possible complications of surgery with you. The most common complication is scarring of the bleb. This prevents fluid from draining from the eye. If the bleb is not working properly, more surgery may be needed.

You can also develop a worse cataract. You may need additional surgery to have your cataract removed if it starts to affect your vision.

One of the most serious problems, as discussed above, is infection. Infection happens to about one in every 1,000 people per year who have had a trabeculectomy. It is important to see your doctor right away if you have pain, redness, decreased vision or increased tearing. Be sure to tell the front desk that it is urgent. State that you have had a trabeculectomy in the past and are experiencing one of these symptoms. 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.

Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Author: Shayla Wilson, MPH candidate

Reviewers: Gale Oren, MILS and Paula Anne Newman-Casey, MD, MS

Patient Education by [University of Michigan Health System](#) is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License](#). Last Revised 11/2014