Why do you need a glaucoma drainage device/tube shunt surgery?

Tube shunt surgery is done to lower your eye pressure when medications, laser or other surgeries have failed to control the disease.

- In glaucoma, your eye pressure is too high for your eye. This causes damage to your optic nerve (the cable that connects your eye to your brain) and permanent vision loss.
- Unfortunately, there is no way to reverse the glaucoma damage that has already happened. But, if you lower your eye pressure, it can prevent more glaucoma damage.

What is glaucoma drainage device surgery?

- In this surgery, a tube is placed in your eye to help drain the fluid from your eye. This helps lower your eye pressure.
- There are different types of tube shunts, and your surgeon will determine the proper type for your eye.

How is the procedure performed?

The surgery is done in the operating room with anesthesia to relax you. Your eye is numbed so you don't feel pain.

- A new pathway for eye fluid to leave the eye is made with the drainage device/tube shunt.
- Your surgeon will place a tiny tube inside the front part of your eye. This tube connects to a flat “plate” that will be attached to the white of your eye (sclera).
- The device is placed under conjunctiva (the thin clear covering over the white part of your eye) so that you will not see the device.

Figure 1: This photo shows an eye from a patient who had glaucoma tube shunt surgery. Usually, you cannot see the tube when looking at the eye normally. In the photo, the patient is looking straight ahead and the eyelid is lifted to show the tube. This patient kindly allowed the use of this photo for education purposes.
What should you expect after the procedure?

You will go home the same day with a patch over your eye. Someone will need to drive you home after the surgery. You usually need to see your eye surgeon the next day.

- Eye drops: Your eye surgeon will start eye drops that need to be used for many weeks after the surgery. These eye drops help to prevent infection, decrease inflammation and prevent scarring from the surgery.
- Your vision may be blurry for a few weeks after the surgery.
- Your eye may feel sore. It may feel like there is something in your eye, like an eyelash.
- Activity restrictions after surgery:
  - No eye rubbing
  - Avoid bending over
  - No heavy lifting (more than 5 to 10 pounds)
  - Wear a shield over your eye while sleeping, usually for at least the first week.
- You will need to follow up closely with your eye surgeon after the surgery.

What are the risks of tube shunt surgery?

Like any surgery, there are risks with this surgery:

- Infection
- Bleeding during or after the procedure
- Eye pressure dropping too low or staying too high
- Double vision
- Droopy eyelid
- Possible need for more surgery if scarring or complications occur

Your doctor has recommended this surgery because he/she feels that the risk of surgery is lower than your risk of losing vision from glaucoma.

Summary

Glaucoma drainage device (or tube shunt) surgery is a type of surgery done to lower your eye pressure when there is a high risk of permanent vision loss from glaucoma. This surgery lowers your eye pressure by putting in a tube that helps drain the fluid from your eye and lowers your eye pressure.