# Glaucoma Surgery



may be some vision changes such as blurred vision for few weeks after surgery. After that time, vision will return to the same level as it was before surgery. Drop in vision (especially in end stage glaucoma's), Cataract formation, and over filtration are some of the complications noted after surgery.

Glaucoma surgery is done to maintain the existing vision that has been already lost, and not to improve the vision.

#### POST OPERATIVE INSTRUCTIONS

- On the day of surgery, rest quietly at home
- Do not rub your eye
- Wash your hands before applying any eye drops
- No heavy lifting for 1 month after glaucoma surgery
- No swimming for 6 weeks (after glaucoma surgery) For swimming advice, consult your eye doctor, you may always need to protect your eyes while swimming

- Do not drive after eye surgery until you feel safe to do so
- Do not use a handkerchief to wipe away any tears; use a clean disposable tissue/sterile cotton.
- No eye makeup (for 2 weeks after cataract surgery, for 2 month after glaucoma surgery)

Please make sure that water does not enter the eye when you wash your face. Wipe eyes and surrounding areas with a clean wet cloth / cotton.

You can start reading, watching TV, etc as soon as you are comfortable. Please do not strain / persist in reading if there is discomfort.

You can go out for walks / drives. Please wear the protective glasses during these outings.

# The Morning After Surgery

Wash your hands with a sterile cotton bud, clean your eyelids with cool boiledwater. Wipe from the nose outwards. You may gently pull down on the eyelid to do this. Put the eye drops as advised by your physician.

## What To Expect After Surgery

Your eye may ache or be gritty for the first 12 hours after surgery. Regular strength painkillers should suffice. After cataract or glaucoma surgery. Often there is very little discomfort, but occasionally due to surface corneal dryness, there can be significant sharpness or a gritty feeling that may take 24 hours to improve. Generally, any discomfort should get better day by day. If you are

concerned, please contact your ophthal-mologist directly. Your eye may water a lot after surgery. This is normal. You may also experience double vision. Again this is normal in the first few days, and any double vision should wear off after 24 hours. Due to the effect of the drops vision may also be slightly blurred and you may experience difficulty reading small print. This will usually become better by two weeks' time.

You may experience some excess sensitivity to light. This usually improves over 1 to 3 weeks after surgery. Sunglasses may help. Your doctor may call you for frequent post-operative checks if he/she suspects that you have a tendency for aggressive healing of the surgical site. Some medications or injections may be advised to control the healing process in this period.

To schedule appointment, Contact:

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#### Glaucoma Service

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Information provided in the interest of patient education. Please clarify any doubts with your doctor.









# Glaucoma Surgery

#### **SURGERY**

Once glaucoma is diagnosed, the primary treatment is to reduce the eye pressure, in order to halt the optic nerve damage.

There are others factors, like blood supply to the optic nerve, inherent (genetic) tendency towards optic nerve weakness, which cannot be altered or treated. These factors unfortunately, also play a role in Glaucoma. However, world over, the Intraocular pressure, is the only identified modifiable risk factor, in this disease.

The extent to which the pressure needs to be reduced varies from person to person, and depends on the highest eye pressure pretreatment; the extent of the damage already present in the optic nerve, and the estimated life span of the patient. The modalities of eye pressure reduction can vary from medical-eye drops and tablets, to laser, and surgical treatment.

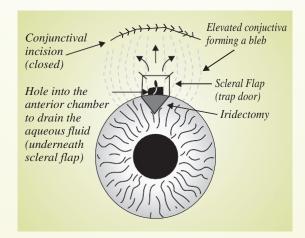
Whatever the modality a doctor chooses in a patient, continued monitoring of the eye pressure, optic nerve, and visual fields is mandatory. None of the treatment modalities, either eye drops., laser, or surgery, offer a completely permanent solution. The effects of treatment vary with time, and continued follow up remains absolutely necessary for the effective management of this problem. There is no one — shot treatment for glaucoma.

Microsurgery for glaucoma can be penetrating or non-penetrating type of

surgery which is done in the operation theatre under local anesthesia.

#### TRABECULECTOMY

In this filtering microsurgery, a tiny drainage hole is made in the sclera, which allows the fluid to flow out of the eye, and helps to lower the pressure. Anti-wound healing drugs such as mitomycin -c or 5- fluorouracil are used during surgery to slow the healing of opening.70 to 90% of operated patients can stop all their glaucoma medications and have controlled eye pressure following the surgery. Occasionally the surgically created drainage hole begins to heal over time and closes causing the pressure to rise again. In such situations your doctor may advise re starting of eye drops to reduce the eye pressure. Your doctor might need to see you very frequently in the immediate post operative period. This is when a tendency for the opening to close down can be detected early and managed with appropriate injections, or medical treatment.



You may also be instructed to massage the eye following the glaucoma surgery. Your doctor will inform you about the technique, and how to perform this finger massage to the eye. You will be required to use the post-operative eye drops for a period of 6 weeks following the surgery. Glaucoma medications, which were being used prior to the surgery, can be stopped unless otherwise instructed.



## OTHER SURGERIES

# Kahook dual blade (KDB) goniotomy and Bent Angle Needle Goniotomy (BANG)

This procedure, is typically combined with cataract surgery, where-in tiny incisions are made in the fluid-draining meshwork in the



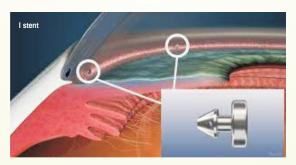
angle of the eye, thus helping release the eye pressure. This can be made with a spear shaped ophthalmic blade(KDB) or a bent 25G needle (BANG)

# Gonioscopy Assisted Transluminal Trabeculotomy (GATT)

A micro-catheter is threaded through an incision to the Schlemm's canal, which is part of the eye's drainage system. This way the entire fluid-draining system in the angle of the eye can be "unroofed," or loosened, with this method, as a result of which the eye pressure reduces significantly.

#### **iStent**

This is a micro-implantable device placed in the draining-meshwork of the eye to help enhance the fluid outflow and thus reduce the eye pressure



# Glaucoma Drainage Devices -

Ahmed glaucoma valve(AGV) or Aurolab aqueous drainage implant(AADI) are small devices placed on the upper surface of the eye. They have a small tube which is placed inside the eye to siphon fluid onto the surface of the eye and thus reduce the eye pressure There