



LGCC
LONDON GLAUCOMA CATARACT CARE

What is a trabeculectomy?

Trabeculectomy is an operation which lowers the pressure inside the eye (intraocular pressure). The eye produces fluid (aqueous humour) which circulates around the front of the eye (anterior chamber) then drains away through a drainage channel (trabecular meshwork). In glaucoma the drainage channel in the eye is not working. A trabeculectomy bypasses the blocked drainage channels, reducing the eye pressure. A small hole is made in the wall of the eye (sclera) allowing fluid to drain under the surface of the eye (conjunctiva) forming a reservoir (bleb). The hole is covered by a trapdoor created in the wall of the eye which is sutured in a way to prevent fluid draining from the eye too quickly.

What are the benefits?

The operation has been suggested because at the current level of eye pressure it is highly likely that you will lose vision in the eye. A trabeculectomy will not restore vision already lost from glaucoma. The operation will not improve your vision. The purpose of a trabeculectomy is to lower the eye pressure. This should stabilise your vision and prevent further damage to your vision and this is achieved in 80 to 90 % of patients.

Complications

Vision

The vision may be blurred for 1 to 2 weeks following surgery and then start to improve. It can take 2 to 3 months for the vision to stabilise and the eye to feel back to normal. You may need to update your glasses after the operation. 5% of patients have some small permanent reduction in vision after surgery. Severe sight threatening complications are rare. However, there is a small risk that your eyesight will be permanently worse after the operation. The risk of sight loss from infection or bleeding in the eye at or around the time of surgery is approximately 1 in 200.

Eye Pressure Control

5% of patients will return to theatre in the first month after surgery for adjustment because the eye pressure is too high or too low. The eye pressure may rise sharply after the operation (aqueous misdirection). This usually requires further surgery. The risk is approximately 1 in 600.

Cataract

If you have not already had cataract surgery, a cataract is more likely to develop after a trabeculectomy operation. This can be treated with surgery.

Infection

There is a small lifelong risk that the drainage bleb may become infected. The risk of this occurring is approximately 1 in 100.

Irritation

After a trabeculectomy the fluid inside the eye (aqueous) drains under the lining of the eye (conjunctiva) forming a diffuse lake of fluid (bleb) under the upper eyelid. This bleb may become too large or extend around the front of the eye causing pain and discomfort (dysaesthesia). Occasionally surgery is required to correct this.

Droopy Eyelid

The upper eye lid may droop a little (upper lid ptosis). This usually recovers, but if not it can be corrected with surgery.

Before surgery

Continue all your eye drops and tablets as per normal.

You will need to be able to lie flat for the duration of the operation, if you are unable to lie flat, please let us know before the day of surgery.

If you are taking blood thinning agents

Aspirin 75mg should be continued as per normal. If you are taking a higher dose of aspirin or clopidogrel, you may need to stop these 10 days before your operation and advice will be provided on alternative blood thinning options. If you are on warfarin please have your INR checked within 7 days before your surgery to ensure that it is below 2. Please have your anticoagulant booklet containing your blood results with you on the day of surgery. If your therapeutic range is above 2 we will advise you in collaboration with your doctor on alternative blood thinning options.

If you are taking Rivaroxaban, Dabigatran or Apixaban

Rivaroxaban – Please do not take the morning dose on the day of surgery, take that day's dose 4 hours after your operation and take the next day's dose at the normal time.

Dabigatran or Apixaban – Please do not take the morning dose. Take the evening dose 4 hours after the operation and take the next day's dose at the normal time.

If you are Diabetic

If your blood glucose is greater than 13 mmol/L, your operation may be cancelled. Your GP can help you improve control of your blood sugar levels.

If you are having local anaesthetic

Most trabeculectomy operations are performed under local anaesthesia without sedation and therefore should eat and drink as per normal before your operation.

If you are having local anaesthetic with sedation

Please do not eat or have a drink that contains any milk for 6 hours before your appointment. You may have a drink without milk eg water, black tea or black coffee up to 2 hours before your appointment time. This drink must not contain any milk. Please do not drink anything for 2 hours before your appointment.

On the day of your operation

All medicines, including eye drops, should be used on the day of surgery unless you are otherwise instructed. Trabeculectomy surgery typically lasts 1 hour, but please allow a bit longer for your appointment. This is a day surgery procedure and you will be discharged from hospital on the same day as your operation. The eye is normally covered with an eye pad after surgery and this is removed in clinic the next day. You are advised to have a friend or relative to accompany you home after surgery.

Anaesthesia

Local anaesthesia: after the eye has been anaesthetised with drops, an injection of anaesthetic will be administered around the eye. This will prevent any pain and excessive eye movement during surgery. You will be awake during the operation.

After Surgery

You will be seen one day after surgery and then weekly for at least the first 4 weeks following the operation. You may be seen more frequently if the eye pressure is too high or too low. Please avoid rubbing your eye. You will be asked to wear a clear plastic eye shield at night for the first 2 weeks to prevent accidental injury whilst you sleep.

Eye Drops

Acetazolamide tablets and any glaucoma drops to the operated eye should be stopped after the operation. It is important that any eye drops for the unoperated eye are continued. A steroid (dexamethasone) one drop to the operated eye every 2 hours / 8 times a day and an antibiotic (chloramphenicol) one drop to the operated eye every 4 hours / 4 times a day will be given to you after the operation. It is not necessary to use these eye drops the first night after surgery. These post-operative drops will normally need to be used for 2 to 3 months after surgery. Although initially the drops are used very often this will soon be reduced at clinic visits. Do not stop the dexamethasone or chloramphenicol drops until you have been told to by the consultant.

Post-operative clinic visits

These visits are very important to secure the long-term success of the operation. At clinic visits sutures may be removed or adjusted to control the eye pressure and additional injections of steroids or 5-Fluorouracil (an anti-scarring drug) may be given around the eye. These procedures are performed in clinic under topical anaesthetic and are well tolerated by most patients.

Activity after Surgery

Reading, using a computer and watching TV are all permissible after surgery. These will not harm your eye. Avoid heavy lifting, gardening and housework for 2 weeks. For the first 2 weeks ensure no water enters the eye whilst showering/hair washing. Please avoid strenuous activity eg tennis, jogging, gym, contact sports or swimming for at least 6 weeks after surgery. Please consult the doctor in clinic before recommencing strenuous activities. Gentle exercise eg walking is fine.

For patients who wish to pray you may kneel but do not bow your head down to the floor for the first 2 weeks. Similarly, activities eg yoga that involve a head down posture should be avoided during this time. Please avoid using eye makeup for the first 4 weeks. When you resume using eye makeup please use new makeup to reduce the risk of infection.

Driving: the time when you can return to driving is dependent on a number of factors and you will have the opportunity to discuss this with your doctor in clinic.

Returning to Work

The duration of time off work will depend on a number of factors, such as your employment, the vision in the other eye and the eye pressure in the operated eye. Typically, someone working in an office requires 2 weeks off work. Occupations involving heavy manual work eg construction work may require 4 weeks off work.

Contact lens wear

Do not wear contact lenses for at least the first 6 weeks after surgery. Due to the drainage bleb formed after the surgery it may be that you are unable to wear contact lenses after the operation.

Travel

You may fly following the operation, but you need to attend many outpatient appointments in the first two months which are crucial to the success of the operation. It would therefore be best not to plan to travel within the first two months following surgery.

Emergency contact

Contact us immediately if you have: loss of vision or your eye becomes increasingly red and painful.