

# Trabeculectomy

ترشيح سائل العين

World leading  
**experts in**  
**eye care**



**Moorfields**  
**Eye Hospital Dubai**  
A branch of Moorfields London



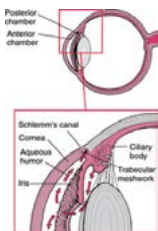
مستشفى كينغز كوليدج لندن  
King's College Hospital London

You may have been told by your doctor that you require an operation to control the pressure within your eye. This operation is called a Trabeculectomy (trab-ec-u-lec-tomy). A Trabeculectomy operation is recommended for patients whose glaucoma continues to progress despite using eye drops and/or having laser treatment.

The goal of the Trabeculectomy surgery is to help lower and control the eye pressure. The eye pressure is known as intraocular pressure. If this remains high, then further irreversible loss of vision from glaucoma may occur.

This operation will not improve your vision or cure glaucoma, but aims to prevent or slow down further visual loss from glaucoma damage.





Trabeculectomy is a surgical operation that creates an alternative drainage channel, to help aqueous fluid (natural fluid of the eye) drain from your eye. This operation creates a bypass for the blocked natural drain (trabecular meshwork) of your eye. Your eye pressure is reduced because fluid can now drain more easily through the newly created drainage channel.

## What is the appearance of the eye after a **Trabeculectomy?**

Initially after surgery the eye will usually be red and swollen to a variable degree. After most types of major eye surgery the eyelid may droop. This resolves slowly over a period of weeks to months.



The drainage bleb is not usually visible to the naked eye after the Trabeculectomy operation but may sometimes be seen if the patient looks in the mirror and raises the upper eyelid.

Usually the patient feels no sensation from the presence of the drainage bleb.

## The surgery

Trabeculectomy surgery takes longer than cataract surgery, typically lasting 60 - 75 minutes. At Moorfields Eye Hospital Dubai, Trabeculectomy may be performed under either local or general anaesthesia depending on the complexity of the case and other factors.

Typically adjunctive Mitomycin C (anti-scarring agent) is also used to reduce healing after surgery. The purpose of using Mitomycin C is to achieve a lower postoperative intraocular pressure that is required to reduce the progression of glaucoma with higher success rates.

### **Complications at the time of surgery:**

Complications can occur at the time of Trabeculectomy surgery, but are rare. Complications when they do occur, tend to occur later after surgery (see success rates and complications – section 5).



# After surgery – **Postoperative care**

## **The day of surgery and the next day**

You will usually be discharged home from hospital later the same day after surgery. It is usually necessary for the operated eye to be examined again one day after surgery.

The eye is normally patched the first night after surgery and the patch removed the following day. If the un-operated eye does not see well, then the operated eye will not be patched. Instead, a clear shield will be placed on the operated eye so that you will still be able to see to get around after surgery.

## **What should I expect to feel during the postoperative period?**

It is normal for the vision to be blurred and the eye to be uncomfortable after surgery. The period of blurring is variable. The blurring is usually worst for the first 1 to 2 weeks after surgery, and improving slowly afterwards. It takes about 2 months for the eye to feel completely normal and the vision to stabilise.

Soreness in the eye after surgery is partly due to the surgery itself, and partly due to the sutures. Sutures are usually removed in the clinic during the first few weeks after surgery. After removal of sutures, the eye usually feels more comfortable.



## **Eye Drops**

Eye drops and tablets to lower the eye pressure are not normally required for the operated eye during the first night after surgery, unless the surgeon recommends that you continue to use them. It is important to continue any eye drops for the un-operated eye unless advised otherwise.

The following day, the postoperative eye drops are usually started after removal of the eye patch and cleaning of the eye. The postoperative eye drops will usually consist of an antibiotic (eg. Chloramphenicol) and anti-inflammatory steroid (eg. Predforte) eye drops to use for the first 2 months after surgery. You will be advised if any changes in these are required at each clinic visit.

To start with the steroid eye drop will be used intensively (every 2 hours or about 8 times daily) during the day and the antibiotic four times daily.

## **Postoperative visits to clinic**

As the intraocular pressure may fluctuate quite markedly in the first few weeks after Trabeculectomy, the patient is usually examined in clinic once weekly for approximately the first month, with visits reducing in frequency after that. Sometimes visits may be more frequent if the eye pressure is too high, too low, or fluctuating markedly. During this time sutures may be removed to adjust the pressure and sometimes additional injections of steroids or a drug called 5-Fluorouracil, that is used to counteract scarring, are given around the eye.



## **Activity and Instructions of care after Trabeculectomy**

Following surgery you are able to read and watch television as normal as these activities will not harm your eye. It is however important to avoid strenuous activity during the first few weeks after surgery. The following table is a general guide to do's and don'ts.

If anything do not rub/bump/press the eye. In dusty environments please wear eye shield or your own glasses. Do not stop your eye drops unless the doctor advises. Do not use any other products in the eye.

If in doubt please ask your doctor or nurse in clinic.



Activity	Advice
Hair Washing	No need to avoid but back wash advised to avoid getting shampoo into your eye. It may be easier to have someone else wash your hair for you.
Showering / Bathing / Wadhu	No need to avoid but don't allow soapy/dirty water to go into your eye
Sleeping	Try to sleep on your un-operated side. Tape the plastic eye shield provided over your eye every night for two weeks to avoid accidentally rubbing your eye whilst asleep.
Walking	No restrictions
Wearing glasses / sunglasses	Do not change the prescription of your glasses until the doctor advises. You may wear sunglasses for comfort and UV protection.
Driving	Your doctor shall advise you. If advised against driving and you continue to do so, this shall be at your own risk.
Flying	No restrictions
Going away on holiday	Discuss with your doctor/nurse as it is very important to attend your follow up appointments.
Wearing eye makeup	Avoid for one week then use new makeup. Never share eye make up with anyone else.
Household chores e.g. cleaning, ironing, hovering	Avoid for 1 – 2 weeks
Sexual Activity	Avoid for 1 – 2 weeks
Gym workout	Avoid for 3 months
Playing any sport	Avoid for 3 months
Running / jogging	Avoid for 3 months
Swimming	Avoid for 3 months, after which you must use goggles
Prayers (Salah)	You may continue prayers but do the rockoo/sajdah in a chair, your head must not go below your heart level.



### **When can I go back to work?**

The duration of time off work will depend on a number of factors such as the nature of the patient's employment, the state of the vision in the other eye, and the intraocular pressure in the operated eye.

Typically someone working in an office environment would require 2 weeks off, if the postoperative course is smooth. Someone whose occupation requires heavy manual work, or work in a dusty environment will require longer (e.g. Builders, working in barren Desert).

### **When is the eye back to normal?**

It takes 2 to 3 months for the eye to feel completely normal in most cases, and sometimes longer in more complicated cases. At that point, the patient will usually have a glasses test, as often the glasses prescription will be slightly different than before surgery.



# Success rates and complications

## Success rates

Long-term studies suggest that most people will achieve a low eye pressure without the need for additional glaucoma medication after Trabeculectomy surgery. In low risk patients, the success rate is over 90%. However, in the average patient, roughly two thirds will achieve a satisfactory level of pressure without medication. Another quarter to one third will still require medication, and a small percentage of patients will require further surgery for uncontrolled pressure.

Uncommonly, a patient will develop pressure that is chronically too low, requiring further surgery to elevate the pressure.

## Complications

As with any surgery, there is a potential for complication or problems to arise. Complications can occur during the surgery, shortly after the surgery or many months after surgery.

Severe complications are rare and may happen either if the eye pressure drops very low, or very quickly during the early postoperative period, or if the eye becomes infected.



## **Bleeding**

The most serious problem that can occur is bleeding inside the eye. This can lead to loss of vision and even blindness but occurs in less than 1 in 1000 patients. There are measures taken to prevent this but this is not a predictable complication.

## **Infection**

An infection inside the eye can be very serious and also cause loss of vision or blindness. This also happens in less than 1 in 1000 patients. Measures are taken and aseptic techniques used to prevent this complication.

## **Pressure**

After the operation the eye pressure may be too high or too low. This may require additional treatment in the outpatient clinic or sometimes further surgery is required.

## **Inflammation**

This can occur inside the eye and is usually treated with eyedrops.

## **Droopy lid**

This can occur after the operation and some patients can be aware of the drainage bleb under the upper eyelid but this usually settles down with time.



As your eye settles and heals and stitches removed you may need a change in glasses, to get your best vision. About 10% of patients notice that their vision is reduced by one line on the eye chart a year after the operation. This is often due to cataract formation which may be increased by Trabeculectomy surgery but is easily manageable and treatable.

### **What if I don't have the operation?**

The advice that has been given to you by the Glaucoma specialist is based on the balance of risk and benefits and if an operation has been recommended then the benefits outweigh the above risks of surgery.

If the operation is not performed in a timely manner then there is potential for further irreversible visual loss due to high pressure/fluctuating pressure in the eye leading to blindness.

However the informed decision rests with the patient and your Glaucoma specialist will be available and very happy to discuss your concerns and expectations before proceeding with surgery.



## Accuracy

While every step has been taken to compile accurate information and to keep it up to date, we cannot guarantee its correctness and completeness. The information provided in this information sheet is designed as an adjunct to, and not a substitute for professional healthcare advice, by a qualified doctor or other healthcare professional, which will be tailored to a patient's individual circumstances. Moorfields Eye Hospital Dubai cannot take responsibility if you rely solely on the information in this information sheet.



## Moorfields Dubai



# Moorfields Eye Hospital Dubai

A branch of Moorfields London

### Moorfields Eye Hospital Dubai

Dubai Healthcare City,  
PO Box 505054, District 1,  
Al Razi Building 64, Block E, Floor 3,  
Dubai, U.A.E.  
Tel. +971 4 429 7888  
[moorfields.ae](http://moorfields.ae)



### Opening hours:

Saturday to Thursday, 8.30am to 5.30pm,  
for information and advice on eye conditions and  
treatments from experienced ophthalmic trained staff.

.....



مستشفى كينغز كوليدج لندن  
King's College Hospital London

### King's College Hospital - Dubai Hills

Dubai Hills, AlKhail Road,  
Marabea East Exit  
Tel: +9714 247 7777  
[www.kch.ae](http://www.kch.ae)  
Open 24/7

