

## Patient Information

# Bleb needling

## Introduction

This leaflet gives you information about the bleb needling procedure which will improve the drainage and lower the pressure in your eye.

## What is a bleb needling?

During your glaucoma surgery a small opening is made under the upper eyelid to let the fluid escape and lower the pressure. The fluid that flows out of your eye forms a small cyst, called a bleb, which is under the conjunctiva, the thin transparent layer that covers the white of your eye.

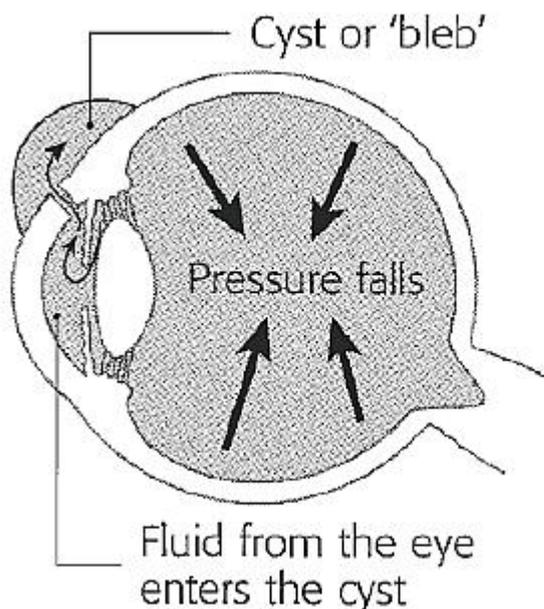


Figure 1: Diagram of the eye after failed trabeculectomy

Drainage surgery for glaucoma may not bring the pressure low enough or may scar and fail. This can happen within the first few weeks after the operation or at any time after. In some cases bleb needling may be part of the glaucoma surgery process to restore or improve drainage and achieve a lower eye pressure.

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Department

**Ophthalmology**

Review due

**April 2024**

## Patient Information

### **Before the operation**

Occasionally bleb needling needs to be carried out urgently but for most patients there will be an interval between your outpatient clinic appointment and your admission date for the procedure.

The wait for surgery is usually less than a few weeks. This short period of time will not cause any harm. While you are waiting for your operation it is very important that you continue with the drops and any medication (tablets) prescribed by your eye doctor.

If you do not receive a date for your operation within 2 weeks, please contact the Admissions Office at Cheltenham General Hospital. The contact details are at the end of this leaflet.

**Please make arrangements for someone to take you home after the operation.**

### **Who will perform the operation?**

The surgeon who performs the operation may not be the same doctor you saw in the clinic. The operation will be carried out or supervised by a highly trained glaucoma specialist.

### **The day of surgery**

- Unless you have been told otherwise your operation will be performed as a day case under local anaesthetic (while you are awake).
- Please arrive on time at Eyford Ward on the second floor of East Block at Cheltenham General Hospital.
- If your operation is being carried out under local anaesthetic you may eat and drink as normal.
- Unless instructed otherwise take all of your usual medications and use all drops as normal.
- Wear comfortable loose fitting clothing. You will not need to undress for the operation.
- Do not wear make-up or bring any valuables.
- The nurses will admit you to the ward and may put some drops in your eye.

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The surgeon will visit you to answer any last minute questions. You will also be asked to sign a form that says you fully understand all about the operation and that you wish to proceed. Before you sign the consent form you should:

- Discuss any concerns with the doctor and/or the nurse.
- Have read and understood this leaflet.
- Have understood all that you have been told about the operation.
- Be aware that as with any operation, there are potential risks and complications as well as the intended benefits.
- Be happy to go ahead with the operation.
- Expect to be in hospital for a total of 1 to 3 hours.

### How is the operation done?

- The procedure is usually carried out with local anaesthetic eye drops only.
- Sometimes local anaesthetic is also injected or infiltrated around the eye – this may sting a little.
- The local anaesthetic is given to prevent any pain or discomfort during the operation.
- You will be aware of the surgeon touching your face and/or forehead; this is normal.

### During the procedure

- You will be lying down.
- Iodine drops are used as an antiseptic.
- A sterile plastic drape is placed over your eye and then passed above your face like an open tent.
- A tube blowing fresh air or oxygen will be placed under the drape allowing you to breathe completely normally.
- The operation is performed under a microscope and involves breaking down the wall of scar tissue, formed at the previous surgery site, using a fine needle. This will help to improve drainage of fluid, called aqueous humour, within your eye.
- An anti-scarring agent is then injected to try and prevent further scar formation.

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- At the end of the procedure the eye is given a small amount of antibiotic and steroid injection to reduce the risk of infection and inflammation.
- The eye is then covered with a shield or a pad.

### After the operation

When you return to the ward you will be offered a drink and something to eat. A nurse will then examine your eye to check that everything is satisfactory before you go home. You will be given full instructions including how to use the drops.

A clinic appointment will be made for the day or week after the operation at either Cheltenham General Hospital or Gloucestershire Royal Hospital.

You need to be aware that you must attend the outpatient clinic regularly and sometimes quite often after the operation.

### Dos and don'ts after the operation

#### Do

- Use the drops as instructed.
- Continue with normal light daily activities but take things easy.
- Avoid splashing soap, water or anything else into the eye.
- Wash your hair in the shower with the eye kept shut or by leaning back at a basin.
- Be aware that your vision may be blurred for a number of weeks after the operation.
- Wear your old glasses if you find them helpful but be aware that they may no longer help with any blurring of the vision in the eye that has received the operation.
- Expect to be off work for 2 weeks.

#### Do not

- Carry out strenuous activities.
- Rub or press on the eye - this is very important.
- Miss any outpatient appointments.
- Drive unless you feel it is safe to do so.

**Patient  
Information****Contact the Eye Clinic urgently if you develop:**

- Increased pain.
- Increased redness.
- Excessive watering or a sticky discharge.
- Rapid loss of vision.

**Eye Emergencies**

Telephone the Eye Casualty to speak to a Nurse Practitioner.

**Eye Casualty**

Tel: 0300 422 3578

Monday to Friday, 8:00am to 6:00pm

Saturday, 8:00am to 1:00pm

Outside of these hours your calls will be directed to the switchboard, please ask to speak to the on call eye doctor.

**What are the risks of bleb needling?****Inflammation, excessive healing or scarring of the drainage site**

These are not uncommon and can result in the drainage site closing and pressure in the eye becoming too high, as it was before the operation. To reduce the risk of this happening your surgeon may use special techniques during the operation. Sometimes bleb needling may have to be repeated if the eye pressure increases.

**Excessive drainage**

If the fluid in the eye drains too quickly the pressure may become very low. This is known as hypotony and can result in the deterioration of your vision. The problem will often resolve with time. Occasionally treatment on the ward as an inpatient may be recommended. Sometimes further surgery is needed.

Permanent loss of vision is not common but can happen.

**Hyphaema**

This is when a small amount of blood collects behind the clear front window of the eye, the cornea. This often clears within a week. On rare occasions the bleeding may be recurrent.

Usually no action is needed other than allowing time for the blood to clear naturally.

**Patient  
Information****Cataract**

Age-related cataract may develop at an earlier age in eyes that have received glaucoma surgery. Very early onset of cataract developing as a result of glaucoma surgery is rare.

**Rare complications include:****Keratopathy**

The anti-scarring agent may cause some changes in the surface of the cornea (the clear window at the front of your eye). This recovers in almost all cases.

**Choroidal haemorrhage**

Bleeding within the layer of blood vessels that nourish the retina in the back part of the eye is a very rare problem that may arise during the operation or in the early days following surgery. If bleeding is localised the eye may recover but in more severe cases permanent marked loss of vision or, even more rarely, loss of the eye may happen.

**Endophthalmitis (infection inside the eye)**

In Gloucestershire only 1 in 1500 eyes develop this serious sight threatening complication in the early period following surgery. In glaucoma surgery the infection may very rarely happen many months or years after the procedure. The first signs and symptoms are increasing pain, redness and deteriorating vision. If you have any of these symptoms, contact the department immediately.

**Very high pressure in the eye**

This is a rare problem that may need a laser or surgical procedure to correct.

**Complete loss of vision in cases of advanced glaucoma**

As discussed above complete loss of vision is normally rare. It can however be a significant risk following surgery in an eye where there is already very advanced loss of vision as a result of glaucoma.

**Patient  
Information****Sympathetic ophthalmitis**

This is inflammation and permanent loss of vision in the fellow eye following surgery in the first eye. This problem is so remote that for practical purposes may be ignored. This extremely rare complication is included in this document for completeness.

The above-mentioned risks are the same as those present when having the original glaucoma drainage operation. The risks of the operation have to be carefully balanced against the risk of damage to your vision if the pressure in the eye is not reduced to a satisfactory level.

This procedure works in more than half the eyes operated on to restore and improve drainage. If it does not work it may be repeated or alternative procedures may be offered.

**Contact information****Admissions Office**

Cheltenham General Hospital

Tel: 0300 422 4001

Monday to Friday, 8:00am to 4:00pm

**Gloucester Eye Clinic**

Tel: 0300 422 8358

Monday to Friday, 8:00am to 5:00pm

**Cheltenham Eye Clinic**

Tel: 0300 422 3200

Monday to Friday, 8:00am to 5:00pm

**Night time and Weekends**

Tel: 0300 422 2222

Please ask for the operator then ask to speak to the eye doctor on call.

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