

Information for patients and carers

Bleb Needling



What is bleb needling?

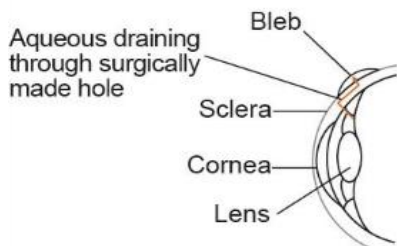
People with uncontrolled glaucoma need a surgical drainage procedure (trabeculectomy) to decrease pressure within the eye. Sometimes the effectiveness of this surgery may decrease over time due to scar tissue formation, making it difficult for the aqueous fluid in the eye to drain. To treat this, it may be recommended that you undergo bleb needling. In this procedure, the scar tissue is broken down to allow the pressure in your eye to decrease and an anti-scarring agent is injected to deter the formation of more scar tissue. This can be done weeks to months after your trabeculectomy.

Why do I need this treatment?

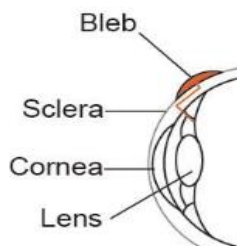
When you have surgery for glaucoma, a new drainage channel is created by making a very small opening in the white of your eye (sclera). This should decrease the pressure in your eye. The aqueous fluid that is draining out enters a reservoir called a 'bleb' just over this surgically made opening. This fluid is re-absorbed back into your body via the bloodstream.

The bleb is a slight bulge located underneath the transparent layer (conjunctiva) that covers the sclera and below the upper eyelid where you cannot see it. Sometimes due to the healing process of the body, this bleb becomes scarred and gets stuck down. This means that the aqueous fluid inside your eye cannot drain properly, therefore, the pressure in your eye increases again.

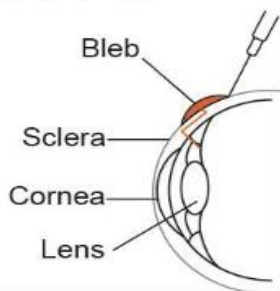
1. Post Trabeculectomy



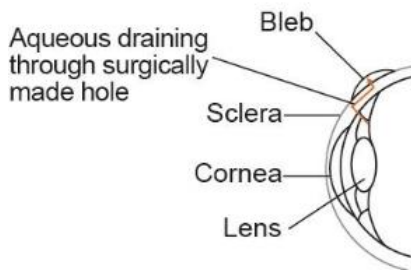
2. Scar tissue forms and blocks drainage



3. Fine needle breaks apart scar tissue



4. Drainage after bleb needling



How successful is bleb needling?

Bleb needling can be a fairly successful procedure and works in more than half the cases. It is usually most successful if the trabeculectomy was performed recently, but other factors such as the amount of scarring, age and ethnicity can also affect the result.

What are the risks involved?

Like any procedure, bleb needling has some risks:

- Rarely, the procedure can make the pressure in your eye very low. We call this hypotony, and it requires further management
- Bleeding and infection can occur inside the eye which can reduce your vision. These occur in less than 1 in every 1000 patients, so the risk is very small
- Your eye may also become inflamed. You will be provided with eye drops to reduce this inflammation following the procedure

You can discuss alternative treatments with your ophthalmology doctor. However, it is important to remember that without treatment your vision could be lost permanently.

What happens before the procedure?

It is important that you continue using your eye drops and taking your medication for glaucoma until the day of the procedure, unless your ophthalmology doctor advises otherwise.

Unless you are having general anaesthetic, you can eat and drink as you would normally before the procedure. If you are having the procedure under general anaesthetic, you will have a preoperative assessment and will be given instructions about fasting before the procedure.

Your ophthalmology doctor will take written consent from you and answer any further questions you have before the procedure. You will be asked to stop blood thinners 48 - 72 hrs before surgery except if you have a prosthetic heart valve in which case the dose of Warfarin might need to be adjusted so that the INR on the day of surgery is no more than 3 and preferably 2.5. This is often done after discussion with the Warfarin clinic.

What happens during the procedure?

This procedure is usually carried out under local anaesthetic however some people may ask for a general anaesthetic.

The surface of your eye is numbed using a local anaesthetic. A fine needle is used to break down the scar tissue. A jelly and an anti-scarring agent (5FU or MMC) are injected around the bleb area. An injection of an antibiotic and a steroid (anti-inflammatory) will be given.

A clear plastic shield is then applied to protect the eye. Most patients say they have only minimal discomfort and the procedure itself is usually very quick, lasting about 10-15 minutes.

What happens after the procedure?

This is usually done as a day-case procedure in the operating theatre. This means you can go home on the same day.

You may remove the eye shield the morning after the procedure. It is advisable that you use your eye shield at night for a few days after the procedure when you go to sleep. This will prevent any inadvertent rubbing of the eye.

You should not drive home immediately after the procedure. It is important to know that you may feel some discomfort following the operation that can last from hours to days. Paracetamol can be used to provide adequate pain relief. Please do not take aspirin or ibuprofen as they can lead to bleeding.

What is the aftercare?

You will be given different eye drops to use following the procedure. These are antibiotic and steroid eye drops to reduce the chance of infection and inflammation. You will be asked to start using these the day after your procedure. Make sure you continue to use your regular eye drops as usual in the eye that has not been operated on.

To reduce your chance of getting an infection, avoid touching your eye, splashing water in your eye, wearing eye makeup or going swimming for at least 4 weeks.

Other things to avoid during this time period:

- Strenuous exercise (gentle exercise such as walking is allowed)
- Lifting heavy objects
- Avoid bending with your head below your waist level for long periods of time

What is the follow-up care?

For the first few weeks following the operation, you will need to attend frequent outpatient clinics in order for the pressure in your eyes to be closely monitored. It is vital that you attend these appointments. The medication that you need to use will be adjusted during these visits depending on your healing process.

What about working and driving?

Most people will require 1 week off work after surgery; however, this depends on the type of job you have and the condition of your eye. It may be required for you to take more time off work if you have a job where you work in a dusty or dirty environment, or if it involves heavy manual labour.

Any issues you have can be discussed with your doctor during your appointments. Please discuss with your doctor when you will be able to resume driving.

What problems should I watch out for?

If you experience any of these symptoms, contact us immediately:

- Vision disturbance, for example vision loss or double vision
- Excessive pain
- Redness
- Swelling of the eyelids

Contact details

Ophthalmology telephone triage service: **01257 245346**.
Monday to Friday 9.00am to 4.30pm

If you feel that your eye condition needs an urgent assessment outside of these hours, please attend the nearest Emergency Department.

Sources of further information

www.lancsteachinghospitals.nhs.uk

www.nhs.uk

www.accessable.co.uk

www.patient.co.uk

www.lancsteachinghospitals.nhs.uk/veteran-aware

<https://bepartofresearch.nihr.ac.uk/>

www.glaucoma-association.com

All our patient information leaflets are available on our website for patients to access and download:

www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

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Please ask a member of staff if you would like help in understanding this information.

This information can be made available in large print, audio, Braille and in other languages.

Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or join our reading group please contact on email address:

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