

Information for Patients

Bleb Needling

What is bleb needling?

In some people, drainage surgery for glaucoma (Trabeculectomy) may fail to bring the pressure low enough or may scar up and fail. This can occur shortly after the operation is performed or at any time afterwards. In some cases, needling may be the next step to restore drainage and achieve a lower eye pressure.

What does the procedure involve?

During your glaucoma Trabeculectomy operation, a tiny opening is made in the white of your eye (sclera) to form a new drainage channel to lower your eye pressure. This allows the eye fluid to drain through the opening into a reservoir called a bleb and then to be absorbed by the body. The bleb is underneath the conjunctiva (thin transparent layer covering the sclera) on the surface of your eye, underneath the top eyelid. This drainage bleb can become scarred and stuck down, often due to your eye healing too quickly after the Trabeculectomy operation. This means that the fluid (aqueous) inside your eye cannot drain away sufficiently, and your eye pressure rises.

Needling involves breaking down the wall of the scar using a fine needle to improve the drainage of fluid inside your eye. A jelly like material and an anti-scarring medicine is then injected to try to prevent further scar formation.

Needling surgery is a quick procedure usually carried out under local anaesthetic but can be performed under a general anaesthetic in some cases. This will be discussed with you prior to your admission to hospital.

Are there any risks or side effects of this treatment?

- 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.
- 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. You will be given antibiotic eye drops to use for a few weeks after your operation.
- Inflammation inside the eye – to prevent inflammation, steroid eye drops are given for you to use for a few weeks after your operation.
- Pain and discomfort – after the needling operation you may have some mild discomfort. Your usual painkiller medication may be taken.
- The pressure in the eye may rarely go too low (hypotony) after the operation and require further intervention.
- The anti-scarring agent may cause a wound leak or change the surface of the clear window at the front of the eye (cornea); this recovers in almost all cases.
- These are the same risks as were present in undergoing the glaucoma drainage operation (Trabeculectomy).

What is the success of bleb needling?

The procedure works in more than half the eyes operated on to restore and improve drainage. A recent audit study here at Manchester Royal Eye Hospital has shown it to be successful in 70% of cases. It is most successful if the Trabeculectomy operation has been performed recently. Bleb needling can be and often is performed more than once.

Before your operation

You should continue any eye drops and and tablets for your glaucoma as prescribed, until the time of your surgery, unless directed otherwise by your ophthalmologist. If you take any blood thinning medicines (e.g., warfarin), please discuss this with the doctor or nurse in clinic. You may be asked to attend a pre-operative assessment appointment. For this appointment, please bring with you an up-to-date list of your current medications and a brief summary of your medical history, available from your GP if you are unsure. During this visit your general health and suitability for anaesthetic will be assessed. Any investigations (e.g., blood tests) will also be undertaken as appropriate.

After your operation

Immediately after your operation your eye will be covered by a protective plastic shield. Eye drops are not usually required in your operative eye until the day after surgery. Any eye drops that you use in your other eye **must** be continued as normal. The morning after your operation you can remove the protective eye shield and gently bathe your eye using cooled boiled water and cotton wool if necessary. You can then start using the eye drops that you have been given. The eye drops you will need to use in your operated eye will be **different** from the drops that you used prior to your operation.

Each time you attend the outpatient clinic, any changes to your eye drops will be discussed with you. If you are running out of the drops you must obtain a repeat prescription for them from your own general practitioner (GP).

Post-operative visits

Your eye pressure can fluctuate widely in the first few weeks after surgery. During the first few weeks you will need to attend the out patients clinic frequently for close monitoring. During this time the treatment plan is tailored according to your individual response to the surgery and the speed of your healing response. Further doses of anti-scarring medication may be required if it appears your eye is again healing over the drainage channel. It is therefore very important that you attend all your clinic appointments and use your eye drops as prescribed.

Returning to work

The length of time you will need off work depends upon a number of factors such as the nature of your job, your vision and the intra-ocular pressure in your operated eye. Most people need 1 week off after surgery. If your job involves heavy manual work or you work in a particularly dusty/dirty environment, you may require longer off. This can be discussed with the doctor/nurse at any clinic visit. You may need to make your employer aware of your need to attend for frequent follow up appointments after surgery.

A self-certifying sick note is required for the first 7 days of absence and is available from your employer or GP, not from the hospital. After the first 7 days a medical sick note is required and is available from your GP or hospital doctor.

Contact information

The information in this leaflet is intended as a guide only, as each patient's experience will be different. If you require any further information or advice, please contact a member of staff on the telephone numbers below.

Do not wait until your next appointment, but contact us immediately, if you have any urgent symptoms such as:

- Increased redness of your eye
- Vision disturbance such as double vision or loss of vision
- Increasing pain

Glaucoma Specialist Nurses (0161) 701 4819 or via switchboard (0161) 276 1234 bleep 1976 available Monday – Friday hours may vary.

Consultant secretaries available Monday – Friday 9.00am – 4.00pm

Miss Fenerty's secretary (0161) 276 5582

Mr Au's secretary (0161) 276 5522

Mr Yau's secretary (0161) 701 5915

Mr Yu secretary (0161) 276 5915

Ms Tacea's secretary (0161) 276 8957

Any of the above numbers could be answer phones at certain times. Your call will be returned but this might not always be the same day.

If you require emergency treatment, you can contact the Emergency Eye Department which is open from 8.00am to 8.00pm every day. Outside of these hours please contact Ward 55 open 24 hours every day. These departments can be contacted via the hospital switchboard on (0161) 276 1234 asking to be put through to the Emergency Eye Department or the ward.

If you have an enquiry regarding your appointment, please contact the appointment booking team:

- Adult glaucoma appointments (0161) 276 5533 (option 1) available Monday – Friday 9.00am – 4.00pm
- Paediatric (child) glaucoma appointments (0161) 276 5533 (option 5) available Monday – Friday 9.00am – 4.00pm