

Ophthalmology department

Preserflo MicroShunt

Information for patients, relatives and carers

Introduction

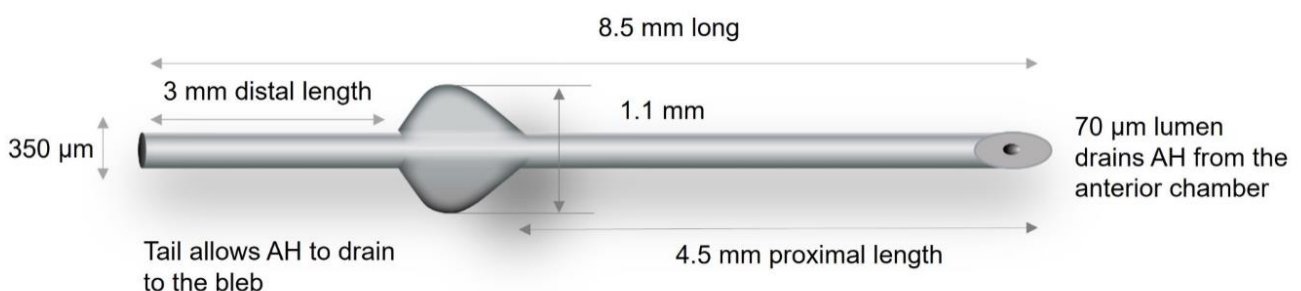
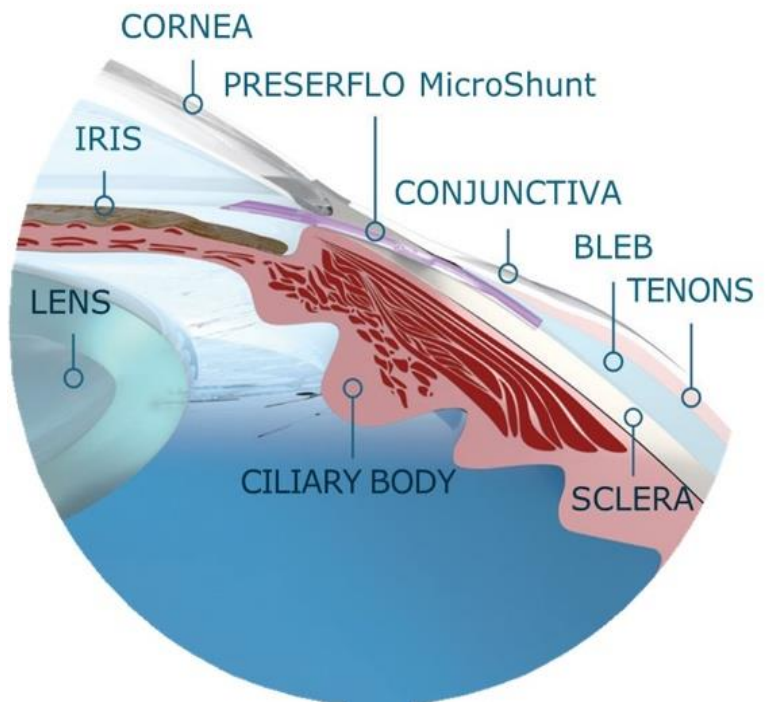
This leaflet has been designed to give you information about a surgical device, the Preserflo MicroShunt, to help treat your glaucoma. We hope to answer some of the questions you might have although it is not meant to replace the discussion between you and your medical team. The aim is to help you understand more about what is discussed and if you have any questions about the information, please contact us.

What is a Preserflo MicroShunt?

A Preserflo Microshunt is an 8.5mm length tube device that is inserted into the eye to help lower intraocular pressure (IOP).

Increased IOP causes glaucoma. This is an eye condition that gets worse over time. It can damage the optic nerve and lead to irreversible vision loss.

The Microshunt works by draining aqueous humour (AH) fluid from inside the eye, where it can cause IOP to increase. The AH is carried outside the eye, under the thin transparent membrane covering the white part of your eye (conjunctiva). The fluid drains and pools under this conjunctiva to form a 'bleb', which appears like a bubble, which is absorbed into the bloodstream.



The Preserflo Microshunt:

- is made from a synthetic material called SIBS that will not harm your body
- is not made from metal
- will not cause an allergic reaction
- will not be rejected by the body
- will not disappear or disintegrate with time
- will not set off airport scanners
- is safe if you need to have an MRI or CT scan

Why would I have the Preserflo MicroShunt?

Your eye doctor (ophthalmologist) may recommend the Preserflo MicroShunt to manage your glaucoma and reduce IOP further, because:

- it may reduce your need for glaucoma eye drops
- the Preserflo MicroShunt is generally better than implants that target the normal drainage channels
- it may help stop your glaucoma getting worse, though it will not cure your glaucoma or reverse any damage to your vision that has already happened
- eye drops or laser therapies may not have been enough to control your glaucoma, or because you are experiencing side effects

What are the risks of having the surgery?

As with all forms of treatment, Preserflo MicroShunt insertion carries some risks and complications. These may arise during or after your operation:

- **bleeding:** immediately afterwards, your eye may look bloodshot because of the local anaesthetic. There is also a small risk of bleeding inside the eye after the surgery. This may need further treatment and can rarely result in loss of sight
- **visual changes:** vision is expected to be blurry immediately after surgery and may take weeks to return to normal. Some patients find their vision is never quite as sharp after the surgery
- **damage to other parts of the eye:** the nearby intraocular lens, cornea or coloured part of the eye (iris) may be damaged

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- **eye pressure too low:** the eye pressure is expected to drop after surgery. Persistent low pressure after surgery, while rare, may require further eye drops
 - **eye pressure too high:** the pressure may remain raised in some cases or increase later. This may need further medical or surgical treatment. This can occur due to a blockage of the tube or scarring of the drainage system
 - **infection:** there is a very small life-long risk of infection after surgery due to the creation of the 'bleb'. This can cause blindness in very rare cases
 - **cloudy lens (cataract):** all eye surgery increases the risk of a cloudy lens forming in the eye. This may later require an operation
 - **drooping upper eyelid (ptosis):** there is a risk of developing a droopy upper eyelid. In most cases, this settles with time but may rarely need surgical correction
 - **need for further treatments:** if the pressure fails to be adequately controlled, you may need to have further eye drops or procedures. If the shunt becomes exposed, this may need to be repaired
 - **visual loss:** there is a rare risk of 'wipeout', which is sudden, severe, and often permanent loss of vision. This is despite successful IOP reduction in those who have advanced nerve damage

Are there any alternatives to this procedure?

There are many ways to treat glaucoma. These include eye drops, laser and other surgical procedures.

Your surgeon will recommend a treatment after they have looked at factors like:

- your eye pressure
- stage and type of glaucoma
- previous treatment
- other eye condition
- your general health
- how easy it is for you to attend follow-up appointments.

Your doctor can talk to you about possible alternatives in more detail.

What happens before the surgery?

You will have a pre-operative assessment appointment to check you are fit for the procedure.

If you have been booked to have surgery under general anaesthetic, your suitability for this will also be assessed.

You will be told which eye drops or oral tablets, or both, you should use as part of your treatment plan until the day of your surgery

If you take any blood-thinning medicine, please tell your eye doctor. You may be asked to stop taking these a few days before surgery.

What happens on the day of my procedure?

You will get all the details on your appointment letter

The team will meet you before the procedure. They will conduct a few checks before the procedure and answer any queries you might have. They ensure everything is ready for your surgery.

The procedure is generally carried out as a day case procedure. You are not expected to stay in hospital overnight. You may expect to be in hospital for about half a day.

What happens during the procedure?

1. You will be given eye drops and a local anaesthetic injection around the eye. This will numb your eye so that you do not feel pain during the procedure. You may feel pressure.
2. Your surgeon will perform the procedure using a microscope which shows a magnified view of your eye.
3. You will be asked to lie relatively flat. Your eye will be held open with a small clip.
4. The conjunctiva, which covers the white part of your eye, will be opened so that the Preserflo MicroShunt can be placed inside your eye.
5. An anti-scarring agent called mitomycin C will be applied to your eye. This increases the long-term success of the surgery.
6. After implantation, the conjunctiva will be closed with stitches. These are either removed in clinic or left to dissolve.

It takes 30 to 45 minutes to implant a Preserflo MicroShunt. It begins working to lower pressure as soon as it is inserted.

What happens after the procedure?

1. Your surgeon will usually place a shield over your eye to protect it. You should leave this on until the morning after surgery.
2. You will spend a short time in the recovery area. You will not be allowed to drive home so you will need to plan to have someone drive you home or an alternative means of transport.

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3. Your eye may feel sore as the anaesthesia wears off. You can your usual pain relief. It is normal that your vision will be blurred and take some time to settle down. It may also fluctuate day to day for some weeks to months.
 4. Your glaucoma team will review you a day after, then one week after, then one month after the procedure, at a minimum.

Do I have to use eye drops after surgery?

Start using steroid eye drops after you remove the eye shield the morning after surgery.

Using these steroid eye drops is essential for the success of your procedure. They:

- help your eye heal
- prevent infection
- prevent inflammation which can cause scarring

You can stop using your glaucoma eye drops in your operated eye (if the pressure rises later, you may have to restart drops). But if you must carry on using glaucoma eye drops in your non-operated eye, if you were using them before.

After the surgery what can I do and what should I avoid?

You are likely to take 2 to 3 weeks to recover from surgery. In this time, you should avoid:

- bending down
- lifting heavy weights
- performing strenuous activity
- contact sports and swimming

We advise you not to fly soon after surgery. Your glaucoma team will need to see you fairly often during the first month after surgery. Also, it is important not to run out of eye drops.

Who can I contact for more information?

- Emergency Department at Western Eye Hospital – 020 3312 3247
- Outpatients at Western Eye Hospital – 020 3312 3236
- Alex Cross Ward. Day care unit – 020 3312 3218/ 9614
- Outpatients at Charing Cross Hospital – 020 3311 1109/ 1233/ 0137

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:
imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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