

Information for patients and carers

Selective Laser Trabeculoplasty (SLT)

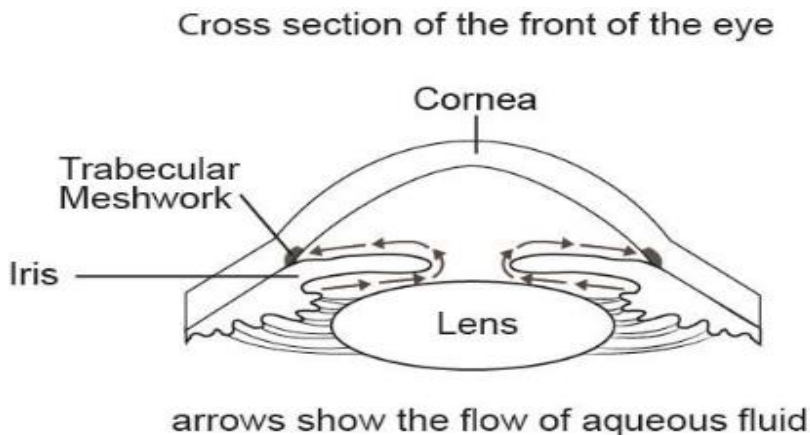
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What is Selective Laser Trabeculoplasty (SLT)?

SLT is a procedure used to reduce pressure in the eye caused by glaucoma.

Aqueous, a fluid which is made in the eye, is responsible for maintaining pressure within the eye. Aqueous fluid flows through the pupil into the front part of the eye, from there it drains away through drainage channels in the eye called the trabecular meshwork. The trabecular meshwork is situated on the inside of your eye between the cornea (the clear front layer of the eye) and the iris (the coloured part of the eye).

In glaucoma, the aqueous fluid cannot drain away properly due to the trabecular meshwork getting clogged up and this can result in a build-up of pressure within the eye. This high pressure can compromise the health of your optic nerve which carries information from your eye to your brain, and if left untreated this causes damage to your vision.



SLT uses a highly concentrated laser beam of light which is directed to the trabecular meshwork and helps to unblock the drainage channels and promotes better flow. The aim of the treatment is to improve the flow of aqueous fluid through the trabecular meshwork in order to

reduce pressure in your eye. Aqueous fluid is not in any way related to your tears, which will not be affected by this procedure.

How successful is SLT in lowering eye pressure?

SLT is successful in about 80% of patients. However, the results of treatment are erratic and temporary. If the treatment is successful, it may be possible to reduce the number of eye drops you currently use to manage your glaucoma. Unfortunately, SLT is not a permanent treatment; the effects may last 6 months to a few years and can be repeated in the future to control your eye pressure.

Then main objective of SLT is also to defer a surgical intervention which may still be needed if disease progression cannot be arrested or even if SLT does not last long.

Will SLT make my eyesight any better?

SLT is performed to preserve the eyesight that you have, it will not restore any sight that you may have already lost, nor will it improve your eyesight.

Any risks or side effects of this treatment?

Your eye may feel a little sore and red after the procedure. Sometimes the eye pressure can rise immediately after treatment in a few cases due to release of pigments from the trabecular meshwork; your eye pressure will therefore be checked 1 hour after the SLT, if it has risen a lot, you may be given some additional eye drops or tablets to take to lower the pressure.

After having SLT, it is normal to have the following symptoms which should gradually improve over 24 hours:

- Irritable eye
- Red eye
- Mild discomfort in the eye
- Blurred vision
- Ache around the eye or a headache

If you have any discomfort once you get home, you may wish to take a painkiller such as paracetamol.

Whilst SLT is a safe procedure it can sometimes lead to inflammation and clouding of the cornea which needs further treatment and can take a few weeks to settle. Please note the last side effect is rare and has been noted 1 in 2% of patients. Overall, this is a safe procedure and does not require much post laser care.

Are there any alternatives to SLT?

The alternative to SLT is to start or continue with eye drops to lower the pressure in your eye. This can be discussed with your ophthalmologist. However, as already mentioned, it is often done to defer surgery, so if this is not successful, surgery may be imminent.

On the day of your SLT appointment

Please put in your usual eye drops on the day of your SLT appointment unless you have been told otherwise by your doctor.

You will not be able to drive home after the treatment, so please arrange transport.

The appointment will last for 2-3 hours, and the procedure is carried out in the outpatient clinic. You will have your vision and eye pressure checked, and then the nurse will put in eye drops to make your pupil smaller to enable the treatment to be carried out.

The procedure will be carried out either by an ophthalmology doctor or specially trained optometrist. You will sit at a microscope which directs the laser beam. You will have an eye drop put in to numb the surface of your eye, then the doctor or optometrist places a special contact lens on the surface of your eye; this lens allows the clinician to view your eye clearly and direct the laser beam to the trabecular meshwork. It is not usual to feel any pain during the treatment, however, do make the staff aware if you are in any discomfort. It takes about 10-15 minutes

to treat each eye. You may initially feel dazzled by the bright light, but this should settle within about 10 minutes after the treatment.

If you need to have SLT to both eyes, this can be done at the same appointment.

What happens after the procedure?

You will return to the waiting area where your eye pressure will be checked about 1 hour after the treatment.

Sometimes you may require additional eye drops for use at home to reduce inflammation in your eye; you will be advised how long you must use these drops for if they are needed.

It is important that you continue to use your usual glaucoma eye drops to the eye or eyes treated unless you have been specifically asked to stop them. If you only had one eye treated with SLT and are using drops in the untreated eye, do continue with these unless you have been instructed otherwise.

What is the follow-up care?

You will require an outpatient appointment in approximately 8 -12 weeks to enable the ophthalmologist to review your eye pressure in response to the SLT treatment as the procedure takes a few weeks to work.

Contact details

If you experience any problems, such as sudden loss of vision or pain, contact the number below:

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/>

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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.

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