



Selective Laser Trabeculoplasty (SLT)



**Division of Surgery – Head and Neck - Ophthalmology** 



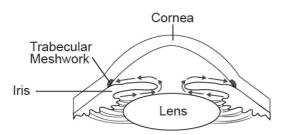
# What is Selective Laser Trabeculoplasty (SLT)?

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 injure your optic nerve which carries information from your eye to your brain, and if left untreated this causes damage to your vision.

Cross section of the front of the eye



arrows show the flow of aqueous fluid

SLT uses a highly concentrated laser beam of light which is directed to the trabecular meshwork and helps to unblock the drainage channels. 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 3 out of 4 patients. 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 effect may last 2 to 5 years and can be repeated in the future to control your eye pressure.

## 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; your eye pressure will 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.

## 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.

## 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 12 weeks to enable the ophthalmologist to review your eye pressure in response to the SLT treatment.

## **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.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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If you want to stop smoking, you can also contact the Quit Squad Freephone 0800 328 6297.

Please ask if you would like help in understanding this information. This information can be made available in large print and in other languages.

### Gujarati

આ માહિતીને સમજવામાં સહાયતા જોઇતી હોય તો કૃપા કરીને પૂછો. આ માહિતી મોટા છપાણ માં અને અન્ ય ભાષામાં ઉપલબ્ધ કરી શકાય છે.

#### Romanian

Vă rugăm să întrebați dacă aveți nevoie de ajutor pentru înțelegerea acestor informații. Aceste informații pot fi puse la dispoziție în format mare și în alte limbi.

#### Polish

Poinformuj nas, jeśli potrzebna jest ci pomoc w zrozumieniu tych informacji. Informacje te można również udostępnić dużym drukiem oraz w innych językach

#### Punjabi

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਸਮਝਣ ਵਿੱਚ ਮਦਦ ਲੈਣੀ ਚਾਹੋਗੇ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਇਸ ਬਾਰੇ ਪੁੱਛੋ। ਇਹ ਜਾਣਕਾਰੀ ਵੱਡੇ ਪਿਰੰਟ ਅਤੇ ਹੋਰਨਾਂ ਭਾਸ਼ਾਵਾਂ ਵਿੱਚ ਮਹੱਈਆ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ।

#### Urdu

معلومات سمجھنے کے لیئے مدد کی ضرورت ہے تو برائے مہریا نی پوچھیے یہ اگر آپ کو یہ معلومات دوسری زبانوں اور بڑی چھپا ئی میں بھی دستیاب ہو سکتی ہے

#### **Arabic**

ً إذا كنت َ تريد مساعدة ً في فهم هذه المعلومات يُرجى أن تطلب يمكن توفير هذه المعلومات مطبوعة بأحرف كبيرة وبلغات أخرى

**Department**: Ophthalmology

**Division**: Surgery **Production date**: August 2022 Review date: August 2025

JR 821 v1