

# Selective laser trabeculoplasty (SLT)

This leaflet explains more about having selective laser trabeculoplasty, including the benefits, risks and any alternatives and what you can expect when you come to hospital.

If you have any further questions, please speak to a doctor or nurse caring for you.

## What is selective laser trabeculoplasty (SLT)?

Selective laser trabeculoplasty is a procedure used to reduce pressure in the eye (also known as intraocular pressure).

If you have healthy eyes, the fluid in your eye (aqueous humour) flows through your pupil into the front of your eye. It then drains away through drainage channels inside the eye called the trabecular meshwork. These drainage channels are situated in the angle of the eye, which is where cornea (clear front layer of the eye) and iris (coloured part of the eye) meet.

However, in some eyes these drainage channels do not work properly so your eye pressure increases. This increase in pressure may injure your optic nerve (the nerve that carries information from your eye to your brain) and impair your vision. This is called glaucoma.

In this trabeculoplasty procedure, a laser beam is applied to the drainage channels, which helps to unclog them. This means the aqueous humour flows through the channels better, reducing the pressure in your eye.

Aqueous humour is a completely different fluid to your tears which will not be affected by this laser treatment.

## Why should I have this treatment?

**It is important to remember that this procedure is performed to save the sight you still have. It will not restore any sight you may have already lost or improve your sight.**

Selective laser trabeculoplasty is successful in about three out of four patients. If the treatment is successful, you may be able to reduce the number of eye drops you currently use to manage your glaucoma.

This is not a permanent treatment, and may need to be repeated in the future to control the eye pressure adequately.

## **What are the risks?**

Complications after this treatment are usually mild and include inflammation and occasionally a sharp increase in the eye pressure. You will be given drops to help prevent these problems. If your eye pressure rises immediately after the treatment, you may need additional eye drops or tablets before you can go home.

We will not know whether the laser treatment has been successful for about four weeks. Occasionally, the laser treatment does not reduce the pressure within the eye to a satisfactory level. If this is the case, you will have to continue with eye drops, or you may need a different treatment.

**If you experience any of the symptoms below any time after your treatment, telephone the Ridley Clinic for advice immediately (contact details are at the end of this leaflet), or visit your nearest A&E Department:**

- **increasing redness of your eye**
- **excessive or worsening pain**
- **loss of vision.**

## **Are there any alternatives?**

The alternative to this laser treatment is to start or continue with eye drops to lower the pressure in your eye, or surgery. Ask your doctor if you would like more information.

## **How can I prepare for selective laser trabeculoplasty?**

There are no special preparations required for this treatment. You can eat and drink as normal, and you must take your usual eye medication on the morning of the laser treatment.

## **Giving my consent (permission)**

We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

## **What happens during the treatment?**

You will need to visit the outpatient department for about half a day. We will carry out the treatment in one of our laser treatment rooms.

The doctor will assess your eye first, and check the pressure. It is important that you use your regular eye medication as normal on the morning of your laser treatment, unless your doctor has told you otherwise.

You will then have some more drops put into your eye, including a drop to protect the eye from any spikes in pressure, and an anaesthetic drop to numb the eye. We usually also put in a drop to make the pupil smaller – this may give you an ache around the eye or a headache. Please let us know if you would like paracetamol as this can help to ease any discomfort.

You will then sit at a machine similar to the one used to examine your eyes at the eye clinic, but with a special laser attached to it.

The doctor will put a special contact lens on your eye before applying the laser beam. This lens allows the doctor to view your eye clearly so he/she can apply the laser to the drainage channels.

The treatment is painless due to the anaesthetic drops used to numb your eye beforehand. It takes about 10 minutes per eye to complete.

## **What happens after the treatment?**

You will return to the waiting area and your doctor or nurse will check the eye pressure about one hour later.

Your vision may be a little blurred and you may be dazzled by the bright light but this should settle within about 10 minutes.

You will be prescribed steroid eye drops to control inflammation within the eye following the laser treatment. The doctor will advise you how long you need to take them for.

**You must continue to use your usual glaucoma eye drops to the treated eye, unless you have been asked to stop them. If you are using glaucoma drops to the untreated eye, please continue to use them unless clearly instructed otherwise.**

You should be able to return to work and your usual activities by the next day.

## **What do I need to do after I go home?**

Your eye may feel a little sore and red after the procedure. If you have discomfort once you get home, we suggest that you take your usual pain relief following the instructions on the packet.

It is normal to have the following symptoms for a few hours after the laser treatment:

- irritable eyes
- red eyes
- mild discomfort.

If any of these symptoms last longer than 24 hours, or if you are worried about your eyes, call the Ridley Clinic for advice (contact details are at the end of this leaflet). You can also leave a message on the Glaucoma Helpline (see the end of the leaflet for contact details) or visit your nearest A&E Department.

You may also find that your vision has altered a little after the treatment due to the drops used. This is normal, and vision usually returns to how it was before the laser treatment within about six hours.

## **Will I have a follow-up appointment?**

You will be seen in the outpatient department about four weeks after the laser treatment to check your eyes and the pressure response to the laser treatment. Your follow-up appointment should be booked for you before you leave the hospital after the treatment.

## Contact us

If you develop any of the symptoms featured in this leaflet, or need urgent advice about your eye(s), please telephone:

- Ridley Clinic on **020 7188 4304**, Monday to Friday, 9 to 5pm
- Glaucoma Helpline (24 hour answerphone) on **020 7188 9121**
- Hospital switchboard on 020 7188 7188, Monday to Friday, 9 to 4pm, and ask for eye casualty.

Outside of clinic hours, please call the hospital switchboard on 020 7188 7188 and ask to be put through to the A&E Department.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)

### Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

**t:** 020 7188 8748 9am to 5pm, Monday to Friday

### Patient Advice and Liaison Service (PALS)

To make comments or raise concerns about the Trust's services, please contact PALS. Ask a member of staff to direct you to the PALS office or:

**e:** 020 7188 8801 at St Thomas'      **t:** 020 7188 8803 at Guy's      **e:** [pals@gstt.nhs.uk](mailto:pals@gstt.nhs.uk)

### Language Support Services

If you need an interpreter or information about your care in a different language or format, please get in touch using the following contact details.

**t:** 020 7188 8815      **fax:** 020 7188 5953

### NHS 111

Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

**t:** 111

### NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

**w:** [www.nhs.uk](http://www.nhs.uk)

### Become a member of your local hospitals, and help shape our future

Membership is free and it is completely up to you how much you get involved. To become a member of our Foundation Trust, you need to be 18 years of age or over, live in Lambeth, Southwark, Lewisham, Wandsworth or Westminster or have been a patient at either hospital in the last five years. To join:

**t:** 0848 143 4017      **e:** [members@gstt.nhs.uk](mailto:members@gstt.nhs.uk)      **w:** [www.guysandstthomas.nhs.uk](http://www.guysandstthomas.nhs.uk)

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