Selective laser trabeculoplasty (SLT)

This leaflet explains more about having SLT, including the benefits, risks and alternatives, and what you can expect when you come to hospital. If you have any questions, please speak to a doctor or nurse caring for you.

What is SLT?
It is a procedure used to reduce pressure in the eye (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. These channels are where the cornea (clear front layer of the eye) and the iris (coloured part of the eye) meet.

Sometimes these drainage channels do not work properly and your eye pressure increases. This increase in pressure can injure your optic nerve and impair your vision. This is called glaucoma.

In a trabeculoplasty procedure, a laser beam is applied to the drainage channels, which helps to unclog them. This means the fluid in your eye 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.

Benefits of having SLT
It is important to remember that this procedure is done to save the sight you still have. It will not restore any sight you have already lost, or improve your sight.

SLT is successful in about 3 out of 4 (75%) patients. If the treatment is successful, you might be able to reduce the number of eye drops you currently use to manage your glaucoma. This is not a permanent treatment, and might need to be repeated to control your eye pressure adequately.
Risks of having SLT
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 might need extra eye drops or tablets before you can go home.

We will not know if the laser treatment has been successful for about 4 weeks. Sometimes, the treatment does not reduce the pressure in the eye to a low enough level. If this happens, you will have to continue with eye drops, or you might need a different treatment.

If you experience any of the symptoms below any time after your treatment, telephone the Ridley Clinic for advice immediately (details are at the end of this leaflet), or visit your nearest Emergency Department (A&E):
- increasing redness of your eye
- excessive pain or pain that gets worse
- loss of vision

Are there any alternatives?
The alternatives to this laser treatment are 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 to prepare for SLT
There are no special preparations needed for this treatment. You can eat and drink as normal, and you must take your usual eye medicines on the morning of the laser treatment.

Consent – asking for your consent
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.

During the treatment
You will need to visit the outpatient department for about half a day. We will do 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 medicine as normal on the morning of your laser treatment, unless your doctor has told you otherwise.
You will 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 put in a drop to make the pupil smaller – this might 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 like 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 they can apply the laser to the drainage channels.

The treatment is painless because of the anaesthetic drops used to numb your eye before the procedure. It takes about 10 minutes for each eye.

**What happens after the treatment?**
You will return to the waiting area and your doctor or nurse will check the eye pressure about 1 hour later.

Your vision might be a little blurred and you might be dazzled by the bright light, but this should settle within about 10 minutes. This might be because your cornea swells, which is usually temporary but might need steroid drops for a few more days.

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

**You must continue to use your usual glaucoma eye drops to the treated eye, unless you have been told 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 you need to do after you go home**
Your eye might feel a little sore and red after the procedure. If you have discomfort once you get home, we suggest that you take your usual painkillers, 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 (details at the end of this leaflet) for advice. You can also leave a message on the Glaucoma Helpline (details at the end of this leaflet) or visit your nearest Emergency Department.

You might also find that your vision has changed a little after the treatment. This is because of the drops we used. This is normal, and vision usually returns to how it was before the laser treatment within about 6 hours.

**Follow-up appointments**
You will be seen in the outpatient department about 4 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 get any of the symptoms featured in this leaflet, or need advice about your eyes, please telephone the Glaucoma call-back service (24 hour answerphone for non-urgent queries), **tel: 020 7188 9121**.

For any urgent problems, please come to the Eye Emergency Department, South Wing, ground floor, 8.30am to 4pm or, outside of these hours, the main Emergency Department (open 24 hours).

For more information on conditions, treatments and services offered at our hospitals, please visit **web: 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, **tel: 020 7188 8748**, Monday to Friday, 9am to 5pm, **email: mymedicines@gstt.nhs.uk**

**Your comments and concerns**
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS), **tel: 020 7188 8801, email: pals@gstt.nhs.uk**. To make a complaint, contact the complaints department, **tel: 020 7188 3514, email: complaints2@gstt.nhs.uk**

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