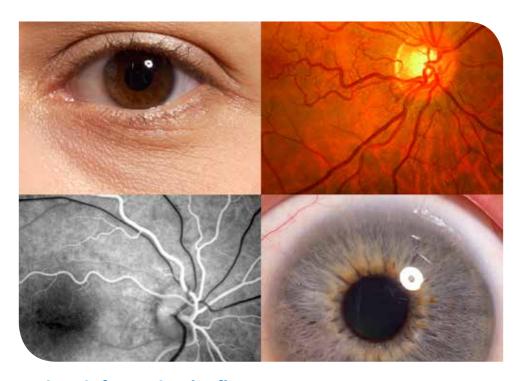


## **Selective Laser Trabeculoplasty (SLT)**

## A treatment for Glaucoma Eye Department



**Patient information leaflet** 

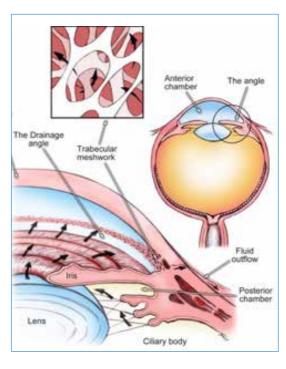
#### Introduction

The aim of this information sheet is to help answer some of the questions you may have about having Selective Laser Trabeculoplasty (SLT). It explains the benefits, risks and alternatives of the procedure as well as what you can expect when you come to hospital. If you do have any questions or concerns, please speak to a doctor or nurse caring for you.

#### What is SLT?

Selective Laser Trabeculoplasty is a procedure used to treat or prevent high eye pressure (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 called the trabecular meshwork. In Glaucoma, the eye pressure (intraocular pressure) is usually elevated and this can cause irreversible damage to your vision. The eye pressure is usually elevated because of microscopic blockage of the



trabecular meshwork, the "drain" inside the eye.

The SLT procedure uses a laser beam to treat the drainage channels and encourage them to drain more fluid. This increase in fluid flow out of the eye can reduce the pressure inside your eye.

Aqueous humour is a completely different fluid to your tears. Aqueous humour is inside the eye, tears are on the outside. Tears will not be affected by the operation.

### What happens during a selective laser trabeculoplasty?

You will need to visit the outpatient department for about half a day. We will carry out the treatment in our dedicated laser treatment room. You don't need any special preparations such as fasting or changing into operating theatre clothes.

The doctor will assess your eye first, and check the pressure. It is important that you use your regular eye medication drops as normal on the morning of your laser treatment – unless your doctor has told you otherwise. Your doctor will talk you through the procedure and explain the risks and benefits of the laser. If you are happy to proceed you will be asked to sign a consent form to give your permission to perform the treatment.

You will then have some more drops put into your eye. These are usually a drop to lower the eye pressure and an anaesthetic eye drop to numb the eye. The laser procedure is performed with you sitting at a machine similar to the machine used to examine your eyes at the eye clinic. However, there is a special laser attached to this machine.

The doctor will put a special contact lens on your eye before applying the laser beam. This lens allows the doctor to view the "drain" (Trabecular Meshwork) inside the eye clearly so he or she can apply the laser and open up the drainage channels.



The treatment is painless due to the anaesthetic drops used to numb your eye before the laser. The treatment takes approximately 10 minutes per eye.

After the procedure, you will return to the waiting area. Your doctor or nurse will check the eye pressure about one hour later before you can go home. During this hour you are free to leave the clinic for a drink or stretch your legs.

# What are the benefits of having Selective Laser Trabeculoplasty?

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; neither will it improve your sight.

If the treatment is successful, most patients can reduce the number of drops used to treat their glaucoma or even stop them completely.

However, this is not a permanent treatment. The effect often wears off between 1 and 5 years later but it can be safely repeated many times.

# Are there any risks associated with Selective Laser Trabeculoplasty?

Complications after this treatment are uncommon. Occasionally your eye pressure will rise immediately after laser treatment. We routinely check for this and guard against it with special eye drops. However if this happens you may need extra treatment before you can go home (such as tablets). These tablets usually quickly reduce the eye pressure but you will be asked to stay in the Eye Clinic for another hour to check their effect. The approximate risk of this pressure rise is 1 in 50 (2%).

We won't know whether the laser treatment has been successful for about six weeks. Sometimes one procedure is not enough and we may need to repeat the laser treatment.

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.

Certain symptoms could mean that you need to return promptly to the eye clinic for an unscheduled check. These include:

- excessive pain
- loss of vision
- flashing lights
- your eye becoming increasingly red

If you experience any of these symptoms telephone the Eye Clinic for advice immediately (contact details are on the back cover page). Or visit your nearest accident and emergency department.

### 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. Sometimes, surgery may also be another treatment option.

# What do I need to do to prepare for Selective Laser Trabeculoplasty?

As this is an outpatient treatment, you can eat and drink as normal. You must take your eye medication as normal on the morning of the laser treatment.

### **Asking for your consent**

We want to make sure you understand your condition and the treatment choices available to you. Before you receive any treatment, the doctor or nurse will explain what he or she is recommending and will answer any questions you might have.

No treatment is carried out without your consent unless it is an emergency and you are unconscious.

For more information, please talk to your doctor or nurse and ask for our hospital consent leaflet.

### What happens after the procedure?

You will be seen in the outpatient department 4-8 weeks after the laser treatment to see if your eye has responded well to laser treatment. Your appointment will come in the post a few weeks before the scheduled date.

If you have discomfort once you get home, we suggest that you take your usual pain reliever following the instructions on the packet (e.g Paracetamol or Ibuprofen).

You will routinely be prescribed anti-inflammatory eye drops to reduce discomfort and inflammation. These are called Ketorolac (Acular).

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

- itchy eyelids
- sticky eyelids
- mild discomfort or headache
- "dim" vision (due to the preparatory eye drops, not the laser procedure itself)

If any of these symptoms last longer than 4 hours, or if you are worried about your eyes, call the Eye Clinic for advice (contact details are on the back cover page). You can also visit your nearest accident and emergency department.

You may also find that your vision is a little blurred. This is normal, and your vision should return to how it was before the laser by the end of the day.

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

We routinely prescribe anti-inflammatory drops after your laser treatment. These help to minimise inflammation (not infection) within the eye. People normally only have to take these for a week at most – the doctor will tell you how long you need to take them for.

You don't need antibiotics because your eye doesn't have an open wound.

If you are using glaucoma drops, please check with the nurse or doctor whether or not you need to continue using them on your treated eye. It is usual to continue using them unless your doctor has said otherwise. If you are using glaucoma drops to the untreated eye, please continue to use them unless clearly instructed otherwise.

#### **Reference sources**

# Can J Ophthalmol. 2014 Dec;49(6):519-22. doi: 10.1016/j. jcjo.2014.10.003.

- Selective laser trabeculoplasty as a first-line therapy: a review.
- Waisbourd M, Katz LJ.

### Clin Ophthalmol. 2015 May 11;9:833-841.

- Selective laser trabeculoplasty: current perspectives.
- Leahy KE, White AJ.

# Surv Ophthalmol. 2015 Jan-Feb;60(1):36-50. doi: 10.1016/j. survophthal.2014.06.006. Epub 2014 Jul 2.

- Systematic review and meta-analysis on the efficacy of selective laser trabeculoplasty in open-angle glaucoma.
- Wong MO, Lee JW, Choy BN, Chan JC, Lai JS.

#### **Contact details**

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

**Telephone:** 01483 571122 **ext** 4640 Monday to Friday 08:30am–5:00pm

Telephone: 01483 571122

Ask the switchboard for Accident & Emergency

#### **PALS and Advocacy contact details**

Contact details of independent advocacy services can be provided by our Patient Advice and Liaison Service (PALS) who are located on the right hand side as you enter the main reception area. PALS are also your first point of contact for health related issues, questions or concerns surrounding RSCH patient services.

Telephone: 01483 402757 Email: rsc-tr.pals@nhs.net

Opening hours: 9.00am-3.00pm, Monday to Friday

If you would like information documents in large print, on tape or in another language or form please contact PALS.

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Author: Carolyn Hunt PIN180917–1584

