

Patient information

Selective Laser Trabeculoplasty (SLT)

St Paul's Eye Unit

Who is this leaflet for?

People with glaucoma or high eye pressures who are having Selective Laser Trabeculoplasty.

The National Institute for Health and Care Excellence recommend 360° selective laser trabeculoplasty (SLT) is offered to all suitable patients as first line therapy.

Eye pressure

The eye has a pressure, a bit like a tyre or a balloon. This pressure is created by fluid being constantly produced inside the eye. The same fluid also has to leave the eye, through a drain in what is called the angle of the eye. If the fluid cannot get out through the drain then the eye pressure goes up.

What is Selective Laser Trabeculoplasty?

It is a laser procedure to the drain of the eye.

Selective What?

- Selective because the laser selects certain parts of the drain to act upon.
- Laser, as it is done by laser.
- Trabeculo- refers to the drain; and –plasty, which means to mould.

Why do I need it?

- Glaucoma is often due to the drain of the eye not working properly.
- This causes the eye pressure to go up.
- High eye pressure can lead to glaucoma or your glaucoma may get worse.
- If the laser works, it may mean that you do not need any eye drops.
- If you are already using eye drops, then if the laser works it would mean that more eye drops or surgery are not needed.

Can all glaucoma patients have laser?

- No, you have to have an 'open angle'. The angle refers to the drain of the eye.
- For the angle to be treated with laser, it has to be visible, or 'open'.

I only have high pressure in my eyes, not glaucoma. Am I suitable for treatment with this laser?

Yes. The idea is to prevent you from getting glaucoma.

What is the benefit of Selective Laser Trabeculoplasty?

To lower the pressure inside your eye(s).

How does it work?

- It stimulates the drain to pump harder.
- More pumping of fluid out means lower eye pressure.

What are the alternatives to Selective Laser Trabeculoplasty?

- There are three ways to lower the pressure inside the eye on a long-term basis: eye drops, lasers and operations.
- Perhaps you already use eye drops, but they do not lower the eye pressure enough, you are getting side-effects or you cannot use them for other reasons.
- Generally, an operation is reserved for patients in whom eye drops and lasers have not worked or are not appropriate.

Is the Selective Laser Trabeculoplasty guaranteed to work?

- The laser procedure works well in about seven out of ten patients were they don't need drops even three years later.
- In some patients a top-up laser might be required.

What if I don't want to have this treatment?

Then your eye practitioner will recommend eye drops / more eye drops to lower the pressure in your eye, or an operation to achieve the same effect.

What happens on the day of treatment?

All your usual medication, including any eye drops, should be taken as usual at home on the day of the planned laser treatment. Please bring them with you along with your current glasses.

The procedure is carried out in the Outpatient Laser Clinic. You will have an outpatient appointment.

- Expect to be there for the whole morning session or afternoon session on the day of the appointment.
- A nurse will test your vision and your eye pressure and explain what will happen.

- Before you have the laser, drops are put into your eyes including drops to numb your eyes and other drops to make the pupil smaller and to protect you from any pressure spikes afterwards.
- These drops will take from 20-60 minutes to work.
- Your eye practitioner will invite you to the examination room to explain the procedure and to sign the consent forms with you.
- When you are ready, the practitioner will take you to the laser room.
- Once you are seated, you will be given eye drops to make the procedure more comfortable, easier and safer.
- The laser machine has a slit lamp which is similar to the one used to examine your eyes in the outpatient department.
- You will be assisted to get comfortable at the laser machine and asked to place your chin on the chin rest.
- The practitioner will then position a special lens to stop you blinking and to help focus the laser beam in the correct place. You don't have to worry that you might be blink at the wrong moment – you won't.
- When ready the practitioner will press on the trigger button and apply the laser.
- You will hear the clicks from the machine and see bright flashes of light.
- You shouldn't feel pain, and if you experience discomfort you should tell the practitioner who will make things more comfortable for you with more anaesthetic drops.
- The whole procedure can take ten minutes per eye. Afterwards you will receive another drop to protect you from pressure spikes.

What does the Laser feel like?

- Most patients feel nothing. You will see flash lights and your vision will be dazzled with the light. If you feel pain please inform the practitioner.
- Most people say it does not hurt. Some people find that the eye aches towards the end of the treatment or may experience headache. Pain relief will be available if needed.

What happens after the treatment?

- You will be asked to return for an eye pressure check one hour after having SLT laser treatment.
- Depending on the reason for the laser, you will either stop your glaucoma drops straight away; or a few days later; or carry on regardless. Your practitioner will advise you.
- You might be given a prescription for anti-inflammatory drops to take home.
- Occasionally, you are given some tablets for a few days after the laser.
- You will be given an appointment to attend for review in approximately six to eight weeks.

What are the risks and possible complications of SLT?

- Inflammation. The eye(s) can become red and sore for the first few days following the laser. If needed, take some pain killers such as paracetamol.
- If your eye is very painful, contact our Primary Care Department for advice. (See the Contact Number below).
- High pressure. The pressure can rise rapidly after laser (a pressure spike) so we check you after an hour. High pressure settles down over 24 hours with some extra drops or tablets.

- It doesn't always work to lower the eye pressure. If this happens, your practitioner will recommend eye drops or an operation.
- It is very rare for this type of treatment to affect your vision. There are very few cases (less than 1%) of loss of vision including blindness. But you may also be at risk of sight loss without any treatment or with surgery.

If you are worried about any of these risks, please speak to your Consultant or a member of their team.

What should I expect after laser?

- After the procedure you will experience some blurred vision on the day, so you must not drive on the day of this treatment.
 But there are no restrictions on activities or work after the SLT treatment.
- There are no other 'Dos or Don'ts' following the procedure. Carry on with all your normal daily activities, including work.

Who do I contact if I have questions or concerns?

In an Emergency:

St. Paul's Primary Care Tel: 0151 706 3949

Text phone number: 18001 0151 706 3949

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Driving and glaucoma

If you are diagnosed with glaucoma and you drive then please be advised that it is mandatory to contact DVLA medical notifications.

Contact details are:

Tel: 0300 790 6806

Email glaucomaqueries@dvla.gov.uk website information www.gov.uk/glaucoma-and-driving.

As a driver, it is your responsibility to inform the DVLA. You must also inform your car insurance company of your eye condition.

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Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further Information:

Glaucoma Nurse Team (9-5pm Mon-Fri)

Tel: 0151 706 5352

Text Phone Number: 18001 0151 706 5352

Primary Care (Out of Hours)

Tel: 0151 706 3949

Text phone number: 18001 0151 706 3949

Glaucoma UK Tel: 01233 648164

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