



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Selective Laser Trabeculoplasty (SLT)

Information for patients, relatives and carers

Ophthalmology Department

① For more information, please contact the Eye Clinic:

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Introduction

This leaflet is for patients undergoing Selective Laser Trabeculoplasty.

Why am I being offered Selective Laser Trabeculoplasty (SLT)?

Glaucoma can sometimes be treated successfully with medications to lower the pressure in the eye. If medications are not effective, laser and other surgical procedures could be of value in controlling the pressure and preventing further vision loss. Both medications and surgery are designed to do one of two things:

- Decrease the amount of fluid production in the eye.
- Improve the flow of fluid out of the eye.

SLT is one option for lowering intraocular pressure (IOP) for patients who have open-angle glaucoma in the early stages, and also in combination with drug therapy or as an alternative therapy when drugs fail. It is a flexible treatment option and can be repeated if necessary, depending on the individual patient's response.

Selective Laser Trabeculoplasty (SLT):

How it works

The trabecular meshwork is around the edge of the iris and is where fluid made in the eye drains out of the eye. This meshwork is treated directly with the laser to improve drainage through it.

SLT uses short pulses of relatively low-energy light to target only the melanin-rich cells in the drainage channel of the eye. The laser pulses affect only these melanin-containing cells, with the surrounding structure being unaffected. This gentle laser treatment induces a response from the body in which white cells are released to clear the affected cells and rebuild the meshwork so that it again functions effectively, reducing the IOP.

Essentially, your body's own healing response (activated by SLT) helps lower the pressure in your eye.

Benefits

SLT effectively lowers raised IOP without the side effects or difficulty of taking eye drops. The treatment is particularly suitable for patients who cannot correctly use, or are intolerant to, glaucoma medications. It can also be used alongside medication to enhance the overall IOP-lowering effect advantage of not causing any damage to the tissue treated.

SLT is a newer form of a long-established treatment that has the advantage of not causing any damage to the tissue treated.

The SLT treatment procedure

Treatment takes place in the outpatient department. A nurse will check your vision and put some drops into your eye to prevent the pressure rising. These drops might cause a temporary headache and can take up to one hour to work. A doctor will take your written consent and explain further if you have any questions.

Once seated in front of the laser machine, which looks similar to the microscope you will have been examined on in clinic, you will have anaesthetic drops put in to numb the front of your eye. A special lens will then be placed against the front surface of your eye. This is not painful, but it might feel a little strange. During the laser treatment, you might see some flashes of light and hear clicking noises. Most patients tolerate the laser treatment well, but some might feel slight discomfort. The procedure takes between 10 and 15 minutes.

You may be given a prescription for drops to take three times daily at home if the eye aches. If it is comfortable there is no extra treatment, but do continue usual glaucoma drops if you are on these. We will make an appointment for you to come back to the clinic approximately six weeks after the laser.

Potential side effects

Your vision will be blurred for a few hours following your laser treatment, but this will settle. The chance of your vision being permanently affected from SLT is extremely small. If you are concerned that your vision is not returning to normal, please contact us on the numbers below.

You are also advised not to drive yourself to the hospital, as you may be unable to drive home if the drops cause blurred vision.

It is possible for the pressure in your eye to increase immediately after the treatment and for there to be inflammation. In order to prevent this, we put in special drops when we treat you which reduce the pressure.

Rarely, the pressure in the eye rises to a very high pressure and does not come down. If this happens, you might require surgery to lower the pressure. This is a very unusual event.

There is a very rare risk of bleeding in the eye during the procedure which normally resolves by its own accord.

Success rate

Studies show a 78% success rate for SLT, with some patients responding well to the treatment, but others not responding at all.

Usually, we cannot predict how well the laser will work as your response is determined by the type of glaucoma you have and the basic make-up of your eye.

If you take eye drops, you will usually need to continue these to lower the pressure after laser trabeculoplasty. It will take up to eight weeks after the laser treatment for the pressure to be reduced. You might require additional laser surgery to lower the pressure if it is not sufficiently low after your first laser treatment.

The effects of the laser treatment might wear off in time; about half of all treatments stop working after five years, but the treatment can be repeated.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact:
Sister, Ophthalmology, The York Hospital,
Wigginton Road, York, YO31 8HE or telephone
01904 726758.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email pals@york.nhs.uk.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

Please telephone or email if you require this information in a different language or format, for example Braille, large print or audio.

如果你要求本資 不同的 或 式提供 , 電
或發電

Jeżeli niniejsze informacje potrzebne są w innym języku lub formacie, należy zadzwonić lub wysłać wiadomość e-mail

Bu bilgileri değişik bir lisanda ya da formatta istiyorsanız lütfen telefon ediniz ya da e-posta gönderiniz

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