

Selective laser trabeculoplasty (SLT)

Introduction

This leaflet is for patients undergoing selective laser trabeculoplasty (SLT)

Clinical indications of SLT

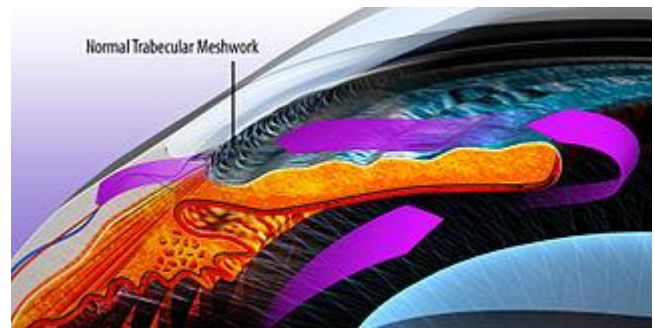
Glaucoma can sometimes be treated successfully with medications to lower the pressure in the eye. If medications are not effective, laser and other surgical procedures could be of value in controlling the pressure and preventing further vision loss. Both medications and surgery are designed to do one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

- Decrease the amount of fluid production in the eye from the cells that make the fluid
- Help the fluid flow out of the eye

SLT is one option for lowering intraocular pressure (IOP) for patients who have open-angle glaucoma in the early stages. It can also be used 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.

How it works

The trabecular meshwork is around the periphery of the iris and is where fluid formed 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 remaining 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 functions effectively again, reducing the IOP.



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, and can also be used alongside medication to enhance the overall IOP-lowering effect.

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

The treatment procedure

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

Once seated in front of the laser machine, which looks similar to the microscope you will have been examined with 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.

About an hour after your treatment, the pressure in your eye will be checked. You will then be given a prescription for drops to take at home for five days. We will make an appointment for you to come back to the clinic, usually one to two weeks later. This follow-up appointment is to check that your eye is settling, although the treatment might take up to eight weeks to work.

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 will be unable to drive home.

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.

We also provide steroid drops, and occasionally extra glaucoma drops following your treatment.

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. However, please be assured that this is a very unusual occurrence.





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. This is because 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 at a sufficiently low level 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. However, the treatment can be repeated.

Contact for further information:

Please contact the main switchboard on 020 7253 3411 and ask to speak to your consultant’s secretary.

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Moorfields Eye Hospital NHS Foundation Trust
City Road, London EC1V 2PD
Phone: 020 7253 3411
www.moorfields.nhs.uk

Moorfields Direct telephone helpline

Phone: 020 7566 2345
Monday-Friday, 8.30am-9pm
Saturday, 9am-5pm
Information and advice on eye conditions and treatments from experienced ophthalmic-trained nurses.

Patient advice and liaison service (PALS)

Phone: 020 7566 2324/ 020 7566 2325
Email: moorfields.pals@nhs.net
Moorfields’ PALS team provides confidential advice and support to help you with any concerns you may have about the care we provide, guiding you through the different services available at Moorfields. The PALS team can also advise you on how to make a complaint.

Your right to treatment within 18 weeks

Under the NHS constitution, all patients have the right to begin consultant-led treatment within 18 weeks of being referred by their GP. Moorfields is committed to fulfilling this right, but if you feel that we have failed to do so, please contact our patient advice and liaison service (PALS) who will be able to advise you further (see above). For more information about your rights under the NHS constitution, visit www.nhs.uk/choiceinthenhs