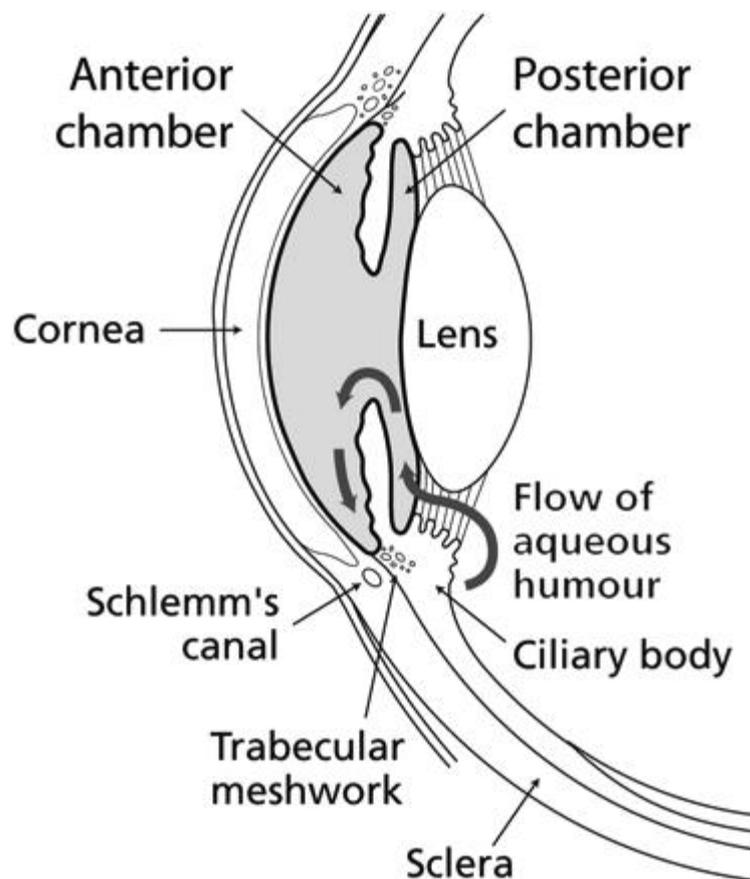


Selective Laser Trabeculoplasty (SLT)

Important information for patients

Glaucoma is a degenerative disease which if left untreated can cause permanent damage to the optic nerve resulting in gradual loss of vision and eventual blindness.

Open Angle Glaucoma causes damage to the optic nerve by an increase in intra ocular fluid (the fluid inside the eye) or a decrease in fluid drainage. This fluid is a normal part of the eye and is called aqueous humor. It provides nourishment to structures in the eye and helps maintain the eyes shape. Normally this fluid drains out of the eye via the trabecular meshwork. Sometimes this process does not work and drainage via the trabecular meshwork can become restricted causing the intra ocular pressure (IOP) to become raised.



A side view of the eye

Why has laser treatment been suggested for me?

Your consultant will have suggested this treatment to you because he feels you will benefit from the pressure in your eye being at a lower level.

SLT is one option for lowering the IOP of patients who have Open Angle Glaucoma. It can be used in combination with drug therapy to further lower the IOP or as an alternative when drugs fail to work or cannot be used.

How does it work?

SLT is an advanced laser system which uses a focused beam of light to treat the drainage angle (trabecular meshwork) of the eye. It uses a low power laser.

The fluid in the eye, (aqueous humor) drains out through the trabecular meshwork. The trabecular meshwork surrounds the iris, the coloured part of the eye. The SLT uses short pulses of low energy light, and only targets particular cells in this area leaving the surrounding structures unaffected. This gentle type of laser then stimulates the body's natural mechanisms to rebuild the meshwork so that it functions again effectively to reduce IOP.

What are the benefits of SLT?

- Can lower IOP without the side effects of drops or difficulty using drops or have adverse reaction to eye drops
- Can also be used alongside glaucoma eye drops to enhance the overall IOP lowering effect
- Does not cause damage to the tissue treated

How is SLT performed?

The procedure is performed in the out patients department by your ophthalmologist. A nurse will test your vision and put in some eye drops. This is to prevent the pressure from rising and will make the pupil small.

The drops might cause a temporary headache. The doctor will take your consent from you for the procedure and explain it in full. You will be able to ask any questions at this time.

You will be seated in front of the laser machine, this looks just like the microscope machine used to examine your eyes. Eye drops will be put in your eyes to numb the front of the eye. A special lens will be placed on the front surface of the eye. This is not painful, but can feel a little strange.

During the laser treatment you may see some bright flashes and hear some clicking noises. Most patients tolerate this procedure well but some might feel slight discomfort.

The procedure takes 10 to 15 minutes. About half an hour after the procedure the pressure in your eye will be checked. You will be given some drops to take home to use for five days. The nurse will explain how to use these.

You are advised not to drive yourself home after the procedure. You will be sent an appointment in the post for a four weeks check-up. The treatment can take up to eight weeks to work.

Potential side effects

Your vision may be blurred for a few hours following the laser treatment but this will settle. If you are concerned that your vision is not returning to normal after a few hours, please contact the department on the numbers provided.

It is possible for the pressure to rise and to develop some inflammation in the eye after the procedure. The drops you are given to take home after the laser treatment will help prevent this. Occasionally the doctor may ask you to take some extra glaucoma medication, drops or tablets for a short time after the treatment. This will be explained on the day.

If you use eye drops, continue to use these after the SLT as it can take eight weeks for the IOP lowering effect to work. Do not stop any drops unless told to do so by the doctor or specialist nurse.

If you have any questions, please feel free to write them down so you don't forget.

Emergency contact information

Eye Care Centre
Leighton Hospital
Middlewich Road
Crewe
Cheshire
CW1 4QJ

Telephone Leighton Hospital Switchboard on 01270 255141 and ask for bleep 2080. Available Monday to Friday, 9.00am - 4.30pm.

Out of these hours, please contact or attend the Emergency Department (A&E) if you feel you have an urgent problem.

This information is available in audio, Braille, large print and other languages. To request a copy, please ask a member of staff.

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