



SELECTIVE LASER TRABECULOPLASTY (SLT) FACT SHEET

(The term 'glaucoma' refers to a characteristic pattern of damage to the optic nerve)

Glaucoma is the name for a group of eye conditions which cause damage to the optic nerve at the back of the eye. When the natural fluid which fills the front part of the eye cannot drain through the trabecular meshwork, this can result in a build-up of pressure within the eye. The high pressure can damage the optic nerve causing loss of vision and, if very high, pain or discomfort. To lower the eye pressure, a procedure known as **Selective Laser Trabeculoplasty (SLT)** may be carried out.

SLT is a laser procedure used to reduce eye (intraocular) pressure, associated with glaucoma, by changing the fluid outflow through the trabecular meshwork, which is a circular drainage area located around the edge of the iris. SLT uses short pulses of low-energy light to assist the drainage of fluid. The procedure is used to treat suitable patients and it may be used in an attempt to lower the eye pressure without the need for drops, or to improve the effectiveness of medication. It has a very low complication rate. The aim of the laser is to lower the eye pressure and hence protect the optic nerve, not improve vision.

Why is this procedure needed?

Your eye specialist (ophthalmologist) might recommend SLT

- As a first-line treatment
- If your intraocular pressure is not being controlled adequately with your current medication
- If your glaucoma is worsening
- If you are experiencing problems with your glaucoma medication

What are the risk and benefits?

SLT lowers the intraocular pressure by an average of 25% in 75-85% of patients treated. For those who do not respond to SLT, your doctor will discuss the type of treatment best suited to your eyes. A particular benefit of SLT is that it may be repeated, as there is no appreciable tissue damage, although treatment success over repeated sessions is lower each time. The duration of the effect of the laser is variable, with an average benefit of around 3-4 years. It may be necessary to supplement the laser with ongoing glaucoma medication as it is generally unusual for pre-existing treatment to be able to be ceased, unless there is an exceptionally good response.

Before the Procedure

Please take all medication as normal or as instructed. SLT is usually carried out under local anaesthetic so, although you will be awake, the eye will be numb so you will not feel any pain. The procedure itself may take less than 5 minutes and is usually performed in the doctor's rooms.

During the procedure

The eye to be treated is anaesthetised with eye drops and a contact lens placed on the eye to precisely focus the laser. The laser is applied to the drainage areas of the eye with typically about 30-60 laser shots per eye done at a time. The laser is too gentle to structurally damage or burn holes in the eye; rather it works by releasing local body chemicals that alter the 'leakiness' of the meshwork, allowing more fluid out of the eye through natural pathways and thereby decreasing the pressure. You may see a bright red light and you may feel a mild tingling sensation with each eye laser shot.

After the procedure

Activity after the procedure is as normal, although you should have someone drive you home. You will need to continue your usual glaucoma medication after the procedure and you may be given some mild anti-inflammatory medications. Vision may be slightly blurred for a day or so but often isn't. It is not unusual to have a gritty sensation in the eye for 2-3 days which should resolve.

Complications

There can be complications but loss of vision or significant inflammation after SLT is rare. The main risks of the laser procedure are:

- The pressure may rise after the treatment, sometimes requiring additional treatment
- A second procedure or another type of surgery may be required.
- Patients may experience transient red, uncomfortable eyes or blurred vision that may last a few days.

If you experience severe pain, sudden loss of vision or discharge, contact your ophthalmologist or the eye hospital or clinic where your surgery was performed.

Follow-up

The pressure will need to be checked to confirm the laser has worked and it may take 4 to 12 weeks to see the full effect of the treatment. Your doctor will discuss when to book your next appointment.-

Selective Laser Trabeculoplasty is considered a safe and effective procedure with few risks. While glaucoma treatments cannot restore vision already lost from glaucoma, early detection and treatment of glaucoma offers the best chance of preserving your vision.

Our Mission: To eliminate glaucoma blindness

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