

Information for Patients

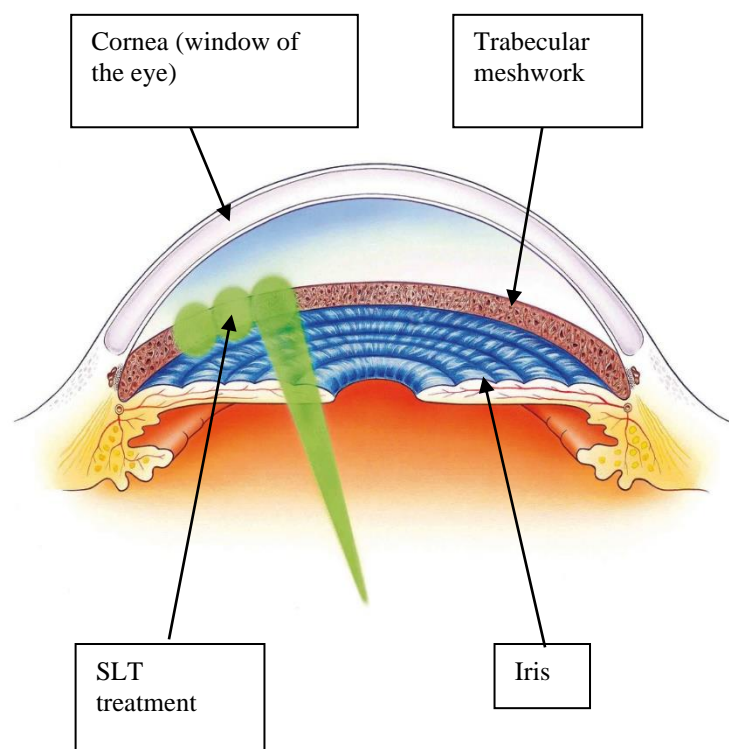
Selective Laser Trabeculoplasty (SLT)

Royal Gwent Hospital Glaucoma Service

You may have been told that you would benefit from a clinic-based treatment called selective laser trabeculoplasty (SLT). This is an effective treatment for glaucoma (damage to the nerve at the back of the eye which can cause irreversible loss of vision) and ocular hypertension (OHT or high eye pressure, which is an important risk factor for developing glaucoma). The goal of treatment is to control (lower) eye pressure to prevent or delay loss of vision. It may prevent the need for pressure lowering eye drops or surgery. It won't cure glaucoma or restore vision lost by glaucoma.

What is selective laser trabeculoplasty (SLT)?

SLT is a safe, gentle laser treatment that targets part of the drainage system in the eye called the trabecular meshwork. The meshwork is found in the "angle" between the iris (the coloured part of the eye) and the cornea (the window of the eye). Treating this area with SLT has been shown to improve the drainage of fluid from the eye, lowering the eye pressure. It is called 'selective' because the laser uses low energy pulses which selectively target the pigmented cells in the meshwork, leaving the areas around it unaffected.



Who is suitable for SLT?

People with a new or previous diagnosis of ocular hypertension (OHT) or open angle glaucoma (OAG) may be suitable for treatment with SLT. Not all types of glaucoma are suitable for treatment with SLT. Evidence is lacking to support treatment of SLT in people who have very reduced peripheral vision (visual field) due to glaucoma.

How is SLT performed?

SLT is performed by an appropriately trained eye specialist in the outpatient clinic using a laser machine like the typical slit lamp that is used to examine your eyes in clinic. You will be given two eye drops by a nurse prior to the procedure. One of these drops makes the pupil smaller to help with targeting the drainage angle. The other lowers the eye pressure to reduce the chances of a spike in pressure immediately after the procedure. These drops can take up to an hour to work and can cause a temporary headache.

An anaesthetic eye drop is used to numb the surface of the eye and a special type of contact lens is used to target the trabecular meshwork. You may be asked to look at a light or in a certain direction to position the eye throughout the procedure. You may hear clicking noises or see flashes of light. One eye is treated at a time, and you may have one or both eyes treated in a single session. It typically takes 5-10 minutes per eye to complete the treatment. Afterwards, you will be asked to wait for 30-60 minutes before having your eye pressure checked.

What are the benefits of SLT?

Glaucoma and OHT have traditionally been treated with pressure-lowering eye drops initially. In recent years the LiGHT study (Laser in Glaucoma and Ocular Hypertension) has demonstrated that SLT is a safe and effective alternative first treatment, potentially avoiding problems with eye drops (including discomfort, and difficulty putting in drops). National best practice guidance by NICE (the National Institute of Clinical Excellence) supports the use of SLT as first line treatment for open-angle glaucoma and OHT.

LiGHT is the largest study of SLT effectiveness and safety. It compared people initially treated with SLT with those receiving eye drops. It found that 7 out of 10 people treated with SLT had lowered and satisfactory eye pressure after 6 years without needing any glaucoma eye drops. Most of these (56%) only required 1 SLT treatment. People treated with SLT also had significantly lower likelihood of needing glaucoma surgery, or cataract surgery, after 6 years, compared with those receiving drops at first.

If you are already taking eye drops you may be able to stop them after SLT. This is not always possible, and you should discuss any change to your medications with your healthcare professional before stopping them.

What are the risks of SLT?

1 in 50 people will develop high eye pressure immediately after treatment. This will be checked, and is usually temporary, but may require treatment with eye drops or tablets that you can take home. There is a small risk of inflammation (1 in 60), and you will be given a prescription for eye drops to take only if the eye becomes sore, red or light sensitive (these can be symptoms of inflammation).

In most people SLT works well, but the pressure lowering effect can wear off with time. In this case the procedure can safely be repeated. In some people SLT is not

effective and they may require treatment with pressure lowering drops despite having SLT treatment.

The drop used to constrict the pupil before SLT (pilocarpine) can cause vision to be blurred for a few hours after your laser treatment, and can cause temporary headache, but this will settle. The risk of any permanent worsening of vision from SLT is extremely small. If you are concerned about your vision or if you are experiencing pain or nausea, please contact us on the numbers below.

Are there any alternatives?

The alternatives to SLT are pressure lowering eye drops which are generally taken one to three times a day.

Sometimes, further treatment with surgery may be required. Your healthcare professional will discuss this with you if so.

Aftercare

You should not drive to your appointment as you will be unable to drive home after your treatment.

Your healthcare professional will arrange follow up in a suitable clinic after your treatment. This is typically two months after your appointment, but this can vary.

Contact Information

Do not wait until your next appointment but contact us if (despite treatment), you continue to have:

- worsening eye redness
- loss of vision
- increasing pain

If you require further information or advice, please contact Mr Kirk's secretary:
01633 656279

For urgent medical queries contact the Emergency Eye Department: 01633 238856

For appointment enquiries, you can contact the Booking Office: 01495 767055

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