

## Information for Patients

# Selective Laser Trabeculoplasty (SLT Laser)

## What is SLT laser?

Selective Laser Trabeculoplasty (SLT) is a safe, quick, simple and non-invasive treatment option used to treat glaucoma. It works by reducing the pressure inside the eye. The eye pressure is known as intraocular pressure (IOP). The procedure does not require admission to hospital and is carried out in the outpatients department.

## How does it work?

There are different ways in which laser treatment can be used to treat patients with glaucoma. SLT uses an advanced laser to target specific cells in the trabecular meshwork (natural drainage channel) of the eye. Short pulses of low energy light are used to target only those cells that contain melanin, a natural pigment.

In response, the cells activity is increased in order to improve the drainage of the fluid in the eye. This in turn lowers the intra-ocular pressure. Some patients can have an early response to the SLT but in most cases it can take up to six weeks for the effects of the laser to be apparent and for your IOP to drop.

**Please continue to use your eye drops/medications for glaucoma as normal, including on the day of treatment, unless instructed otherwise.**

## What to expect before treatment

Prior to having SLT you will have your IOP checked. In preparation for your laser treatment, two eye drops will be instilled into your eye to prepare your eye for laser. These drops take approximately one hour to work.

## What to expect on the day of treatment

Expect your visit to take approximately three hours.

Drops will be instilled into your eye to temporarily numb the surface of the eye. The laser is given through a specially designed microscope which you sit in front of. It is very similar to the slit lamp microscope you sit at in clinic to have your eye examined. The doctor will hold a special lens to your eye for better viewing. You will hear the laser pulses as short clicking sounds and may see bright flashes of light. The entire procedure takes about five minutes. Immediately after the SLT another drop is put in the eye to keep the eye pressure low. The laser treatment is generally painless, only a few patients experience some discomfort.

## What to expect after treatment

You will be asked to wait for approximately one hour after having the SLT so that your intra-ocular pressure can be re-checked. In some cases, you may occasionally be given a prescription for anti-inflammatory eye drops to take home. In this case, these eye drops can be used twice a day for two days if you experience any discomfort. You will also be given an appointment to attend for a review in the outpatient clinic. There are no activity or work restrictions needed after SLT, however, you are advised not to drive on the day of this treatment because of the effect of the constricting eye drops and the bright light of the laser.

## Are there any side effects of SLT?

Temporary/short term side effects include:

- Red eye – For a few hours after the SLT you may find that the white of your eye appears red. This is due to the lens used on your eye during treatment and will resolve.
- Blurred vision – Your vision may be blurred for a short time after laser treatment due to the bright light and will resolve usually within six hours. We therefore advise that you do not drive home after your treatment.

- Raised intra-ocular pressure (IOP) – Some people’s eyes respond to the SLT with a temporary rise or spike in pressure within the first hour after treatment. This is the reason we re-check your eye pressure after SLT and so that we can give you any additional treatment if required. There is a very small risk that your intra-ocular pressure may go up significantly which may cause a change or reduction in your vision and require additional treatment.
- Mild inflammation within the eye – This occurs infrequently and is treated with anti-inflammatory eye drops. Not every patient will experience this.
- A rare risk of changes within the cornea (the clear window at the front of your eye) which could reduce your vision.

## How successful is SLT at lowering your eye pressure?

SLT is not recommended for all types of glaucoma and does not work for all patients. Its success can vary on an individual basis and will be discussed with you by your doctor, but studies have shown on average a 70% success rate.

The effects of the laser may wear off over time. About 50% stop working after five years. As the SLT laser does not damage the trabecular meshwork of the eye, it may be repeated.

The information in this leaflet is intended as a guide only as each patient’s experience will be different.

## Contact information

If you require any further information or advice, please contact a member of staff on the telephone numbers below. Contact us immediately if you have:

- Loss of vision.
- Your treated eye becomes increasingly red or painful.

Miss Spencer's secretary (0161) 276 6949  
Monday – Friday 9.00am – 4.00pm

Miss Fenerty's secretary (0161) 276 5582  
Monday – Friday 9.00am – 4.00pm

Mr Au's secretary (0161) 276 8957  
Monday – Friday 9.00am – 4.00pm

Mr Mercieca/ Mr Yau's secretary (0161) 701 5915  
Monday – Friday 9.00am – 4.00pm

Contact the Glaucoma Specialist Nurse or nursing staff for advice and information on (0161) 701 4819 available Monday – Friday 8.00am – 6.00pm. There is an answerphone service available to leave a message.

If you are unable to contact the nursing staff or secretary please telephone the Emergency Eye Department for advice. It is open every day, from 8.00am – 8.00pm  
Telephone: (0161) 276 5597