# **Ophthalmology Department**

# What is SLT /Selective Laser Trabeculoplasty?

SLT (Selective Laser Trabeculoplasty) is a gentle laser treatment offered to improve intraocular pressure (IOP) control in Ocular Hypertension (OHT) or in certain types of glaucoma. If IOP not well controlled then in the long term it can cause permanent damage to the optic nerve which can potentially lead to blindness.

#### How SLT works?

- The laser uses low potential energy to stimulate specific cells (melanin rich) in trabecular meshwork. This in turn improves the outward flow of the fluid from the eye to offer better IOP control.
- SLT may help to bring IOP down directly or may help to improve overall IOP control indirectly by decreasing day to day variation.
- It takes around few weeks to couple of months to see benefit of SLT.
- SLT may work in 3 out of 5 patients and when it works then it may last for an average of 3 years if used as first line of treatment.



Images from IGA - International Glaucoma Association website



#### Who can benefit from SLT?

- As per the NICE guidance published in Jan 2022, people with newly diagnosed open angle glaucoma and OHT should be offered SLT rather than drops where applicable.
- SLT could be offered in patients who are already on drops in following situations, if their angles are open or become open after another laser or after cateract surgery.
  - Patients who cannot tolerate the eye drops or prefer not to use the eyedrops or find it difficult to use it regularly.
  - Patients who are already on the drops but need further reduction of IOP.
  - Patients who got limited options of choosing the drops due to pregnancy or other general health issues.

#### What are the side effects or risks for SLT?

- After SLT, the vision could be blurred for few hours, so it is advisable not to drive immediately after the laser.
- After SLT, there could be some discomfort for a day or so, one can take painkillers if needed.
- Some patients may experience increased sensitivity to bright light for a few hours to couple of days.
- In some patients, IOP could be raised for short duration which can be controlled with additional drop.
- In very rare cases there could be transient swelling of surrounding structures (like cornea or retina), which is known to resolve on its own.

#### If it works, then can it be repeated?

- Yes, it can be done again, up to 2-3 times, though its effect may not last for similar length of time.
- SLT is not known to impact outcome of any other procedures needed in the future.

### Who will do my SLT?

• SLT will be done by a doctor or any other specially trained healthcare practitioners like optometrists, orthoptists, nurses or other clinical practitioners.

### What preparation needed before SLT?

- Patients may not be able to drive for at least a few hours after the laser due to blurring, discomfort or increased sensitivity to bright light. So don't depend on driving himself/herself to go back home.
- On the day of the laser, patients who are already on the drops should use their glaucoma drops in the morning or in the previous night as per the regular schedule.

## What happens during the procedure?

- SLT is not known to cause any pain; though patient may feel some discomfort.
- Patients don't need to worry about blinking, as before starting the laser, clinician will put in a second contact lens with cold jelly to keep the eye open.
- SLT will be done during planned clinic visit. On arrival, doctor will explain the procedure and will ask to sign the consent form. The eyes will be numbed with eye drops. During the laser procedure, a special contact lens will keep the eye open and avoid blinking. During the treatment, clinician will guide the patient to direct eye movements as necessary. The procedure will take around 5-10 mins for each eye. Patients will see flashing lights throughout the laser treatment.
- Both eyes will be treated on the same day, unless only one eye needs treatment. Each eye may receive laser shots ranging from 60-100. Actual numbers could be variable as per the response and access to the angles.
- Depending on the individual response to the laser, some patients may need additional eyedrop after the treatment. Patients may need to wait for extra half an hour after the laser for repeat IOP check.
- Patient will get follow up appointment in 4-6 weeks to check pressure by orthoptists. Further review will be arranged with doctor accordingly.
- After SLT is done, patient should continue using their glaucoma drops as per the schedule unless advised by the clinician. Clinician may give further instructions for changes in the drops regime before comes for IOP check.

• If there are any concerns during interim period, please contact us on -

#### Daytime 9am to 5pm

• Ophthalmology Department Telephone: 01484 355085

### After 5pm, weekends and Bank Holidays

• CRH Ward 8D 01422 223820

If you have any comments about this leaflet or the service you have received you can contact :

**Ophthalmology Department** 

Telephone: 01484 355085

www.cht.nhs.uk

If you would like this information in another format or language contact the above.

Potřebujete-li tyto informace v jiném formátu nebo jazyce, obraťte se prosím na výše uvedené oddělení

Jeżeli są Państwo zainteresowani otrzymaniem tych informacji w innym formacie lub wersji językowej, prosimy skontaktować się z nami, korzystając z ww. danych kontaktowych

ਰ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਪ੍ਰਾਰੂਪ ਜਾਂ ਭਾਸ਼ਾ ਵਿੱਚ ਲੈਣਾ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਉਪਰੋਕਤ ਵਿਭਾਗ ਵਿੱਚ ਸਾਡੇ ਨਾਲ ਸੰਪਰਕ ਕਰੋ।

> اگر آپ کو بی معلومات کس اور فارم بھٹ بی زبان می درکار ہوں، تو برائے مہربازی مندرجہ بالا شعبے می ہم سے رابطہ کری.

"إذا احتجت الحصول على هذه المعلومة بشكل مغاير أو مترجمة إلى لغة مختلفة فيرجى منك الاتصال بالقسم المذكور أعلاه"

