Patient Information

Royal Devon University Healthcare NHS Foundation Trust

Selective Laser Trabeculoplasty

Glaucoma

Glaucoma is a disease of the eyes which causes damage to the optic nerve and a reduction in the field of vision. Generally, the pressure within the eye (intraocular pressure or IOP) is raised but can also be normal. Vision loss from glaucoma is irreversible but can usually be controlled with early detection and treatment.

Glaucoma management is a lifelong process that requires frequent monitoring and constant treatment.

Reducing the pressure within the eye is the only proven way of controlling glaucoma. The treatment of glaucoma involves the use of different eye drops, laser, and surgery.

The laser treatment

Selective Laser Trabeculoplasty or SLT is a safe and well-established procedure that effectively reduces eye pressure in most patients with glaucoma.

SLT can be offered as an initial treatment in both glaucoma and ocular hypertension, or as an additional treatment to drops.

In SLT, short pulses of low energy light are used to stimulate certain cells in the drainage network of the eye, with the surrounding tissue left unharmed. The end result is increased conductivity of the drainage system, which in turn leads to a lower IOP.

The prognosis

SLT is effective in approximately 80% of patients. However, It takes a few weeks to a few months to obtain the full treatment response. The effect is not permanent and will usually wear off within one to three years but can be repeated again in the future. The failure of the treatment does not compromise the future success of initiating eye drops to control the pressure.

Potential side effects

The complication rate following SLT is very low.

It is likely that your vision will be slightly blurred following the procedure, but this usually settles without treatment within 24 hours. You cannot drive on the day but can plan to work and drive the next day, provided you were previously deemed fit to drive prior to the laser treatment.

The laser can cause low grade inflammation in the eyes and this may result in mild light sensitivity for a day or two. In some cases, this may be severe or persistent enough to warrant treatment with anti-inflammatory drops.

It is possible for the eye pressure (IOP) to increase immediately after the treatment in about 5-10% of people. For this reason, you will receive a pressure lowering drop to the eye(s) immediately following the laser treatment and be asked to wait between one and two hours before having your pressure re-checked. If the pressure is below a certain level, you will be allowed to go home.

Other side effects such as permanently raised eye pressure, corneal inflammation and macular oedema do sometimes occur after SLT but are thankfully very rare. In most cases they respond well to additional treatment, usually in the form of eye drops. In rare cases, further laser treatment or surgery may become necessary.

The risk of your vision being permanently reduced after SLT is extremely low.

The treatment procedure

The procedure will take place in the glaucoma outpatient department.

You will be given anaesthetic drops to numb the eye(s) and asked to sit in front of the laser machine. The machine looks similar to the standard microscope used to examine your eyes in clinic.

Summary:

- SLT is a gentle and safe procedure used to reduce the pressure within the eye.
- It is effective in about 80% of patients and side effects are uncommon.
- The effect of the laser is not permanent but if successful can be repeated.
- If you are already on treatment with eye drops, please continue to use them before and after SLT treatment, unless advised otherwise by the clinician.
- On the day of the laser procedure, you cannot drive.
- The appointment time can last up to three hours.
- If you experience any side effects, please contact the Glaucoma service or **111** out of hours.

Glaucoma Heavitree Hospital **01392 406045**

Useful websites/addresses

Glaucoma UK

www.glaucoma.uk

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