Selective Laser Trabeculoplasty (SLT)

This leaflet aims to explain what this procedure is and how it is carried out.

Glaucoma

•  Glaucoma is a group of conditions where the increased pressure inside the eye causes damage to the optic nerve, resulting in reduced vision

•  This high pressure can cause loss of vision and, if very high, pain or discomfort

•  Without treatment, patients usually lose vision slowly over the course of many months or several years

•  Once vision is lost, it is not possible to restore it

•  The aim of treatment is to minimise any further damage to your vision and to help you keep useful vision for as long as possible

What is Selective Laser Trabeculoplasty (SLT)?

•  SLT is a relatively new treatment option for lowering the pressure within the eye

•  SLT works by selectively placing a very low energy light burn on damaged cells in the trabecular meshwork (responsible for draining fluid out of the eye), while not affecting the surrounding structures

•  The short pulses of laser encourage the body to clear the damaged cells and rebuild the meshwork, allowing better drainage of fluid out of the eye and thereby reducing the pressure within

•  SLT is an alternative or additional treatment for patients who cannot correctly use or tolerate glaucoma medication, or when the intraocular pressure is still too high, despite medication

•  About 6-7 out of 10 people have improved eye pressure control following SLT

The procedure

•  This procedure is carried out within the clinic and takes around 10-15 minutes per eye

•  You will be seated in front of the laser machine which looks similar to the microscope used to examine your eyes in clinic. Local anaesthetic drops are used to numb the front of the eye and a special contact lens is then placed on the surface of the eye. This is not painful but may feel strange

•  During the treatment you may hear clicking noises and see flashing lights. Most patients tolerate this treatment well but a few may feel some slight discomfort

After the procedure

•  Your eye pressure often needs to be measured about one hour after the procedure

•  Your vision will be blurred immediately after the procedure for a short period, so you cannot drive home afterwards

•  You will then have a post-operative appointment a few weeks later

•  It can take a few months for SLT to have its full effect on the eye pressure

•  If you were using anti-glaucoma eye drops before SLT, you should

continue using them unless your doctor says otherwise

•  Some patients may be given an anti-inflammatory drops for one week following treatment

Side effects

SLT is a safe procedure and the risk of adverse effects is minimal but you need to be aware of the following information:

•  Some patients (3-4 out of 10) may not respond to treatment and it is not possible to predict who will respond

•  The benefits of treatment may wear off in time. It is thought that about half of all treatments stop working within five years, but SLT can be repeated

•  You may experience some redness, eye discomfort or blurry vision after the procedure for a short time – a few hours or sometimes a few days. This will slowly resolve on its own

•  Mild inflammation within the eye – This occurs infrequently and is treated with anti-inflammatory eye drops.

•  Occasionally the pressure in the eye may increase immediately after the treatment and you may need extra eye drops following your treatment for a short time

•  Rarely the pressure in the eye can become very high and does not come down with medication so surgery may be required to lower the pressure

Further Questions

If you have any further questions about your surgery or aftercare, please do not hesitate to discuss the matter with a doctor or member of staff before proceeding with your surgery.