Glaucoma

Glaucoma is a disease of the eye which causes damage to the Optic nerve. Usually the pressure within the eye (intra-ocular pressure or IOP) is raised. Vision loss from glaucoma is permanent but can usually be prevented with early detection and treatment.

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

Reducing pressure of the eye is the only proven way of controlling glaucoma. The treatment of glaucoma involves the use of different eye drops, laser and surgery. Each form of treatment has advantages and disadvantages.

The laser treatment

Selective Laser Trabeculoplasty or SLT is a safe and simple out-patient procedure that effectively reduces eye pressure in most patients with glaucoma. This treatment is usually required when eye drops are not enough in controlling the glaucoma or if the use of drops is not possible. SLT is also sometimes used as a first line treatment for glaucoma.

In SLT, multiple laser applications are applied to the drainage part of the eye (anterior chamber angle) with the help of a contact lens. The procedure takes around 10 minutes per eye. It is usually undertaken in a single clinic visit.

After the laser treatment you will be asked to wait for about 2 to 3 hours to check the pressure in your eyes before you leave. A few eye drops (topical anaesthetic and pressure lowering drops) will be instilled in your eyes before the procedure.

The prognosis

SLT is an effective treatment option for various types of Glaucoma. It works in about 80% of cases to help lower the eye pressure.

If patients are already on eye drops for glaucoma, they are normally advised to continue taking their eye drops after the laser treatment.

It takes a few weeks to a few months to get the response to the treatment. The effect usually lasts for a few years and the SLT can be repeated, if necessary.

The side effects

The procedure is usually painless and most patients feel their eyes have recovered by the following day. You cannot drive immediately following the laser but can plan to return to work and driving the next day.
The laser works by producing some low grade inflammation in the eyes and this may result in the eyes being a little light sensitive for a week or two afterwards. In some cases this may be severe enough to warrant treatment with some anti-inflammatory drops.

In around 3 to 4 patients in a hundred the eye pressure will rise significantly immediately following laser. This may require additional treatment for a few days afterwards but in almost all cases will settle. Some patients are at higher risk of this than others and if this applies to you the ophthalmologist will explain this to you prior to the laser. Studies suggest around one in a thousand patients get a significant increase in their eye pressure which is permanent and would require additional eye drops or surgery to deal with. Other side effects such as corneal or retinal problems can occur after SLT, but these are uncommon (occur in less than 1 in 100 people) but could have a permanent effect on the vision.