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Patient Information Leaflet – Glaucoma Procedures

Selective Laser Trabeculoplasty (SLT)

What is Selective Laser Trabeculoplasty (SLT)?

- Also known as Selective Laser Trabeculoplasty, SLT is a simple, effective laser procedure that reduces the intraocular pressure associated with glaucoma. It is performed by your ophthalmologist, and typically involves a short treatment duration
- 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
- 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

How does it work?

SLT uses short pulses of low-energy light to target the melanin, or pigment, in specific cells located in the drainage angle of the affected eye. In response, the body's natural healing mechanisms go to work to rebuild these cells. This rebuilding process improves drainage and lowers intraocular pressure. The surrounding, non-pigmented cells – as well as the rest of the eye structure – are untouched and undamaged.

Does SLT hurt?

No. SLT is painless. Some patients complain of a slight ache afterwards, but this settles.

What happens during the procedure?

- This procedure is carried out in the clinic and takes a short treatment duration
- 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

What happens after the procedure?

- Your eye pressure often needs to be measured about one hour after the procedure
- Your vision will be blurred immediately following 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 up to 3 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 anti-inflammatory drops for one week after treatment

Are there any 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 may not respond to treatment (up to 20%) 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 after five years, but SLT can be repeated. When repeated the laser may not be as effective as the initial application.
- 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 gradually resolve on its own

- Occasionally the pressure in the eye may increase immediately after the treatment and you may require 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

Should you require further information please contact my secretary.