

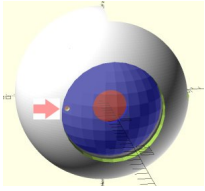
Laser treatment for glaucoma is used in a variety of ways. Laser can be used for angle closure, when it is applied to form a tiny opening in the iris (known as an iridotomy), or laser is used to treat the ciliary body (either externally or internally), or laser can be applied to the drainage angle (selective laser trabeculoplasty) to lower eye pressure.

### YAG laser iridotomy

Laser iridotomy is performed as a preventative measure against, or as treatment for, narrow angle glaucoma. The purpose of the laser is to reduce the risk of sight loss. Vision can be affected quickly if the eye pressure rises very high. It is a relatively simple treatment nowadays, with more modern lasers delivering very little energy (eg 10-20mJ) to make a tiny opening in the iris. The iridotomy is usually less than 0.75 mm in diameter. The laser treatment typically takes less than 5 minutes, although drops are given beforehand (pilocarpine drops) in most cases so that the laser opening is positioned in the peripheral iris. Recovery after YAG PI is quick, typically 2-3 days. A short course of topical steroid drops after treatment may be given to keep the eye comfortable as there can be some sensitivity to light for a few days after treatment.

Details about the iridotomy treatment:

- You will be asked to sign a consent form.
- Anaesthetic drops will be put in the eye(s) that need laser.
- Several individual laser applications are required, and this takes only a few minutes. Each spot is perceived as a bright flash of light.
- Each laser application typically does not cause discomfort. Most people feel only a mild discomfort, rarely it is possible to feel pain.
- The iris is a form of muscle and can bleed. If this happens, it can blur the vision for many days, but this is uncommon.
- Iridotomy can sometimes cause glare / dazzle symptoms longer term (less than 5%).
- Sometimes a second treatment is required.
- You may be given drops or tablets after laser treatment for a few days.
- You should tell your doctor if you have any drug allergies as this might alter the medication given.



**3D model of eye with arrow indicating approximate size of iridotomy.**

## Selective laser trabeculoplasty

SLT treatment lowers eye pressure by treating the drainage angle - the trabecular meshwork (the trabecular meshwork is a thin strip of porous tissue found in the front of the eye). This type of laser typically lowers IOP (eye pressure) by several points, and lasts for years in most cases. Like all treatments for glaucoma, the effect can wear off in time. This is important to understand, as in many chronic conditions (for example like arthritis) the treatments are aimed to prevent the situation from getting worse (in the case of glaucoma by lowering IOP to a safe level), rather than from curing the condition. Unfortunately, any field lost from glaucoma is invariably permanent, however the good news is that every point of IOP lowering makes the risk of progression of glaucoma lower. SLT also helps to reduce the fluctuations in eye pressure noted moreso in glaucoma patients. For more information about SLT and different research papers, please click see here: <http://www.glaucoma-specialist.com/component/content/article/25-glaucoma/47-research-on-slt.html>

Notes about the SLT procedure:

- You will be asked to sign a consent form.
- Afterwards, most patients do not notice any pain or discomfort.
- The effect of laser treatment can take many weeks (even 2-3 months) for a drop in eye pressure to be noted.
  - If you have a dry eye, please take lubricants a little more often 2-3 days before laser, as the can be a little drier with laser treatment.
  - SLT laser works well in around 2/3rd of patients, i.e. not in everybody. SLT is a very safe treatment, safer than all types of surgery, and therefore it is considered at an earlier stage in many cases.

## Laser treatment for glaucoma (PI / SLT)

Written by Administrator

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SLT laser machine