

YAG Laser Peripheral Iridotomy

Ophthalmology Departments

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Aim of leaflet

To explain the term narrow angle and angle closure glaucoma.

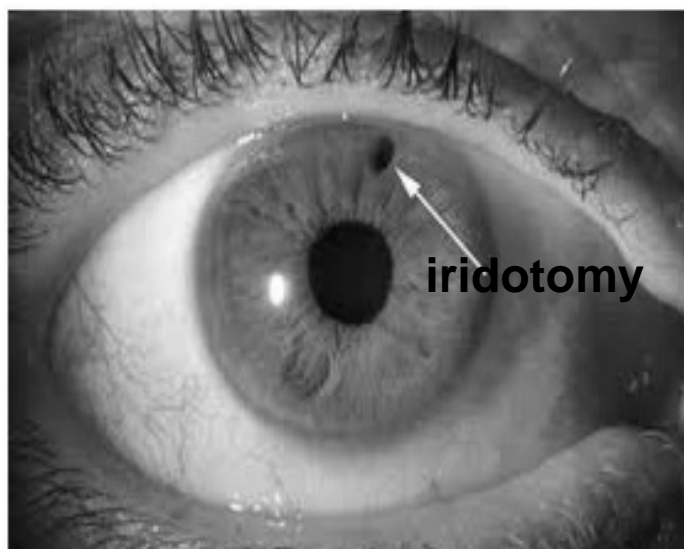
What is laser iridotomy?

Laser iridotomy is a laser procedure for patients who have angle closure glaucoma or at risk of developing angle closure.

What is angle closure?

The fluid of the eye (aqueous humour) drains through very fine channels called trabecular meshwork. The trabecular meshwork is tucked away in the 'angle' of the eye, where the clear part (cornea) meets the coloured part (iris). In eyes with already narrow angle, the iris, due to its close proximity, can close the angle physically. Due to angle closure, fluid will not drain, causing the eye pressure to go up rapidly.

High pressure in the eye can damage the optic nerve - the nerve that carries vision information to the brain - resulting in visual loss.



What is the treatment?

Laser iridotomy is a procedure where a laser is used to create a small hole in the iris. The fluid can then flow freely through this tiny hole preventing the forward movement of the iris tissue, thus keeping the angle open.

What happens on the day?

Laser iridotomy will be carried out in our laser room as an outpatient treatment. You will need to come in for about half a day and will not require special preparation or fasting.

Before laser iridotomy, two separate drops will be instilled into your eyes, one to constrict the pupil (Pilocarpine) and the other to lower the pressure of the eyeball (Apraclonidine). Kindly inform the nurse if you are allergic to these drops or have heart conditions such as angina or have previously had a heart attack. You must be consented before the laser procedure.

Just before the laser procedure, anaesthetic drops will be instilled. Laser will be done on a machine similar to the one used in the eye clinic to examine the eye - a slit lamp. A doctor will place a special contact lens on your eye for better viewing.

During the laser procedure you may see a flash of light or hear a clicking noise as the laser is delivered. Generally, laser procedure is painless but some patients may feel a slight discomfort or 'ping' like sensation. On average the treatment takes around 10 minutes or so.

For dark pigmented iris (dark brown eyes) sometimes it is difficult to create a hole with the conventional laser. Such cases may require an additional treatment with a different laser (argon) before the standard laser. If this is the case, it will be discussed with you.

What happens after the procedure?

Intraocular pressure is measured approximately one hour after the laser treatment. If the pressure is high, you will be given tablets and/or drops to use for a few days.

Anti-inflammatory drops are prescribed after laser treatment to be used in the treated eye for about one week. If you are on any other drops ask the doctor whether you need to continue after the laser treatment. In the majority of cases, patients are advised to continue with their anti-glaucoma drops.

A follow up appointment will be made for a check up one or two weeks after the procedure.

What are the symptoms after the laser treatment?

Your vision will be slightly blurred following the laser treatment. You are advised not to drive immediately following the laser treatment. Your vision will usually return to normal by the end of the day or the next morning.

The effect of the pupil constricting drops will wear off after several hours. These drops may give a mild to moderate headache. Patients may experience discomfort for a couple of hours and are advised to take pain relievers according to the instructions on the packet.

If any of these symptoms last longer than advised, or you are worried about your eye or vision, call the clinic for advice. The contact details are given at the end of the leaflet.

What are the risks associated with laser iridotomy?

Generally, it is a very low-risk procedure and side effects are uncommon.

The most common adverse event is a temporary rise in intraocular pressure, usually one hour after the procedure.

Pressure lowering drops are given before and after the procedure to reduce the risk of high pressure. If the pressure goes up, it can be treated with further medications.

Other temporary side effects are:

- Blurry vision - usually settles down by the next day.
- Small amount of bleeding from the iris or inflammation - bleeding is self resolving and inflammation is treatable with steroid drops given after the treatment. Excessive inflammation may cause the pupil to get stuck to the lens. In such cases the pupil may not dilate very well in future, but this will not have any effect on vision.

Less common side effects are:

- Visual disturbance like glare, ghost image, halos, crescent or lines have been reported. Around 5 to 10% of patients will report one or more of the above mentioned symptoms.
- Occasionally the opening is small or incomplete - it may need a repeat treatment at a later date.

Very rare and serious side effects:

- Rare side effects like bleeding in the eye (retinal haemorrhage) have been reported.

If you experience excessive pain, redness or visual loss, then you should contact the department immediately (contact details at the end of the leaflet).

How successful is this treatment?

It is rare to have an acute angle closure glaucoma after laser treatment and 8 out of 10 people will have successful widening of the angle. There is a small possibility of developing an acute attack of glaucoma or a slow rise of pressure despite the treatment.

Not all the patients with narrow angle will go on to develop angle closure glaucoma, but laser iridotomy is often performed as a preventative measure because of its relatively low risk, compared to potential serious consequences of angle closure glaucoma.

What are the other alternatives?

A cataract operation is an alternative to laser treatment but carries greater risk of complications, although after cataract operations the risk of developing this type of glaucoma is eliminated.

Contact details

If you have any questions about any of the information contained in this leaflet or feedback or concern following laser treatment, please contact:

Clinic 8, Outpatient clinics, Lincoln County Hospital	01522 307180
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References

If you require a full list of references for this leaflet please email patient.information@ulh.nhs.uk
The Trust endeavours to ensure that the information given here is accurate and impartial.



If you require this information in another language, large print, audio (CD or tape) or braille, please e-mail the Patient Information team at patient.information@ulh.nhs.uk