Having a laser iridoplasty

The aim of this information sheet is to answer some of the questions you may have about having a laser iridoplasty. It explains the benefits, risks and alternatives of the procedure as well as what you can expect when you come to hospital. If you do have any questions and concerns, please speak to the doctor or nurse caring for you.

What is a laser iridoplasty?
Laser iridoplasty is a procedure used to treat angle closure. If you have healthy eyes, the fluid in your eye (aqueous humour) flows through your pupil into the front of your eye, and drains away through drainage channels called the trabecular meshwork.

However, if you have angle closure, these drainage channels are obstructed by the iris (the coloured part of your eye) which has moved forward. Because of this, the aqueous humour cannot leave your eye, so your eye pressure (also known as intraocular pressure) increases or is at risk of increasing in the future. The increase in eye pressure could injure your optic nerve – the nerve that carries information from your eye to your brain – and potentially damage your vision.

In an iridoplasty procedure, a laser beam is applied to the iris (the coloured part of your eye) next to the drainage channel. This causes contraction of the iris, which helps to open up the drainage channels. As a result, the aqueous humour can flow through the channels better.

What happens during a laser iridoplasty?
You will need to visit the outpatient department for about half a day. We will carry out the treatment in one of our laser treatment rooms. You don’t need to do any special preparations such as fasting or changing into operating theatre clothes.

The doctor or nurse will assess your eye first, and check the pressure. It is important that you use your regular eye medication drops as normal on the morning of your laser treatment, unless your doctor has told you otherwise.

You will have some more drops put into your eye. These are usually one drop to lower your eye pressure, and an anaesthetic drop to numb your eye. You will then sit at a machine similar to the one used to examine your eyes at the eye clinic, but with a special laser attached to it.

The doctor will place a special contact lens on your eye before applying the laser beam. This lens gives the doctor a magnified view of the area of the iris they will be treating with the laser beam. The laser beam will be applied onto the outer edge of the iris (coloured part of the eye) close to the drainage channels, which move the iris away from these drainage channels to allow the fluid (aqueous humour) to leave the eye more easily.

The treatment is painless due to the anaesthetic drop used to numb your eye before the laser, but you might get a slight discomfort when the laser is being applied. It takes about 10 minutes. After the procedure, you will return to the waiting area. Your doctor or nurse will check the eye pressure about one hour later.
What are the benefits of having a laser iridoplasty?
It is important to remember that this procedure is performed to help control your eye pressure and save the sight you still have. It will not restore any sight you may have already lost; neither will it improve your sight.

The aim of this laser treatment is to help control the pressure inside your eye or to reduce the risk of it going higher in the future. The laser aims to improve the drainage of the fluid (aqueous) within the eye. Without having this treatment, you are at increased risk of developing sudden (acute) glaucoma and irreversible blindness.

Are there any risks associated with a laser iridoplasty?
Complications after this treatment are usually mild. Inflammation within the front part of the eye is common and you will be given anti-inflammatory drops to use four to eight times a day for up to two weeks to control this.

Occasionally your eye pressure will rise immediately after laser treatment. If this happens, you may need extra treatment before you can go home. This treatment usually comes in the form of eye drops and occasionally tablets too. Your doctor will let you know which treatment you need and advise you of how long you need to take the treatment for. We may start the treatment in the hospital and you may be asked to remain in the department until your eye pressure has reduced to a normal level. This should take a few hours at most.

It will take about six weeks to find out the results of the laser treatment. Sometimes one procedure is not enough and we may need to repeat the treatment.

Occasionally, laser treatment does not open the drainage space in the eye to a satisfactory level. If this is the case you may need a different treatment.

Certain symptoms could mean that you need to be treated quickly, including:
- excessive pain
- loss of vision
- flashing lights
- your eye becoming increasingly red.

If you experience any of these symptoms please see the contact advice at the end of this leaflet, or visit your nearest emergency department (A&E).

Are there any alternatives?
An alternative to this laser is a cataract operation, which may not be the best option for every patient. It also carries a greater risk of complications.

Some patients with angle closure glaucoma also develop a long-term rise in their eye pressure. In this case, you may need drops or other treatments in the long-term to keep your eye pressure within safe limits.

What do I need to do to prepare for a laser iridoplasty?
As this is an outpatient treatment, you can eat and drink as normal. You must take your eye medication as normal on the morning of the laser treatment.
Giving my consent (permission)
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

If you would like more information about our consent process, please speak to a member of staff caring for you.

What happens after the procedure?
You will be seen in the outpatient department a week or two later to make sure your eye has responded well to treatment. You will have another check-up to see if the treatment was successful. You should be given a follow-up appointment before you leave the hospital after your treatment.

If you have discomfort once you get home, we suggest that you take your usual pain reliever following the instructions on the packet.

It is normal to have the following symptoms for a couple of hours after laser treatment:
- a slightly red eye
- be a little light sensitive
- mild eye discomfort
- transient blurring or alteration of your vision

If any of these symptoms last longer than 24 hours, get worse or if you are worried about your eyes, call the iris clinic for advice (contact details at the end of this leaflet). You can also visit your nearest emergency department (A&E).

Your vision should return to how it was before the laser by the next day.

What do I need to do after I go home?
We will prescribe anti-inflammatory drops after your laser treatment. These help to minimise inflammation (not infection) within the eye. The doctor will tell you how long you need to take them for. You don’t need antibiotics because your eye doesn’t have an open wound.

If you are using glaucoma drops, please check with the nurse or doctor whether or not you need to continue using them on your treated eye. It is usual to continue using them unless your doctor has said otherwise. If you are using glaucoma drops to the untreated eye, please continue to use them unless clearly instructed otherwise.
Contact us
If you develop any of the symptoms featured in this leaflet, or need urgent advice about your eye(s), please call the iris clinic on t: 020 7188 4307, Monday to Friday, 9am-5pm, or eye casualty, t: 020 7188 7188, Monday to Friday, 9am-4pm. If out of hours, please go to the main emergency department (A&E) where an eye doctor will be called to see you.

For non-urgent queries about your laser treatment, call the glaucoma call-back service on t: 020 7188 9121, Monday to Friday, 9am-5pm, and leave your name, telephone number and a brief message. You will be contacted within 48 hours (Monday to Friday only) excluding public holidays.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit w: www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline. t: 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS)  e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints)  e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch. t: 020 7188 8815  e: languagesupport@gstt.nhs.uk

NHS 111
This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111  w: www.111.nhs.uk

NHS website
This website gives information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing. w: www.nhs.uk

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.
t: 0800 731 0319  e: members@gstt.nhs.uk  w: www.guysandstthomas.nhs.uk/membership

Was this leaflet useful?
We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, w: www.guysandstthomas.nhs.uk/leaflets, or e: patientinformationteam@gstt.nhs.uk