

Having a laser peripheral iridotomy

The aim of this information sheet is to answer some of the questions you may have about having a laser peripheral iridotomy. 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 a doctor or nurse caring for you.

What is a laser peripheral iridotomy?

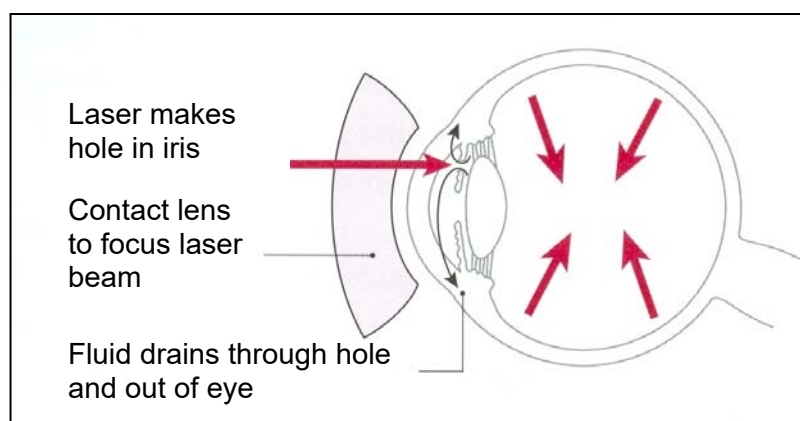
A laser peripheral iridotomy is a treatment used to treat angle closure.

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, aqueous humour cannot leave your eye, so your eye pressure increases (also known as intraocular pressure).

The build-up of pressure injures your optic nerve – the nerve that carries information from your eye to your brain – and damages your vision.

A peripheral iridotomy uses a laser beam to create a small hole in your iris. This forms a permanent passage through which aqueous humour can flow through and pushes the iris tissue backward, thus unblocking the drainage channels.



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Ophthalmology, Health
Press, Oxford 2001.
Illustrated by Dee McLean

Aqueous humour is a completely different fluid to your tears – they will not be affected by the operation.

What happens during a laser peripheral iridotomy?

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 do not 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 then have some more drops put into your eye. These will usually be a miotic (a drop to make your pupil smaller), a drop to lower the intraocular pressure (the pressure inside your eye due to aqueous), and an anaesthetic eye drop to numb your eye.

You will then sit at a machine similar to the machine used to examine your eyes at the eye clinic. However, there is a special laser attached to this machine.

The doctor will put a special contact lens on your eye before applying the laser beam. This lens allows the doctor to view your iris clearly so he or she can apply the laser and make the hole in your iris.

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. This takes about 20 minutes.

After the procedure, you will return to the waiting area. Your doctor or nurse will check the eye pressure about one hour later. He or she will then examine the eye to check the newly formed opening is working well.

What are the benefits?

It is important to remember that this procedure is performed to save the sight you still have. It will not restore any sight you may have already lost; neither will it improve your sight.

The laser treatment is to prevent a sudden (acute) rise in pressure within your eye. Without having this treatment, you are at risk of developing sudden glaucoma and irreversible blindness.

Are there any risks?

Complications after this treatment are uncommon. 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, but may come in the form of tablets. Your doctor will let you know which treatment you need and will advise you of how long you need to take the treatment for.

If we do treat you with eye drops, a doctor or nurse will put them in your eye before you leave hospital. You will be asked to remain in the department until your eye pressure has reduced to a satisfactory level. This should take a few hours at most.

Occasionally the laser beam opening is incomplete, or not big enough. This will be discovered either after your treatment, or on your follow-up visit. If this is the case, we will have to repeat the treatment at a later date.

A small number of patients find that extra light enters through the new opening, which can be a little distracting at first. However, most patients find they are soon able to ignore this.

Other complications are haemorrhage in the eye from the laser and inflammation – this is usually small and can be treated with more frequent steroid drops.

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, telephone the Ridley Clinic for advice immediately (contact details are on p.4). Or visit your nearest accident and emergency department.

Are there any alternatives?

An alternative to laser treatment is a cataract operation, which is not suitable for everyone. It also carries a greater risk of complications. There are no other alternatives to open up the drainage channels in your eye.

Some patients with this condition also develop a long-term (chronic) 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?

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 (unless instructed not to).

Asking for your consent

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.

No treatment is carried out without your consent unless it is an emergency and you are unconscious.

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 gritty, sticky eyelids and mild discomfort for a couple of hours after laser treatment. The eye drops can also take some time to wear off, and you should not be alarmed if your pupils are still small for several hours after treatment.

The drops can also cause a mild to moderate headache across your brow. Because they make your pupil small, you might find that a dim or dark room is quite dark. Do not panic. The drug will have worn off by the morning, and your pupils should be back to their normal size again.

You may also find that your vision is a little blurred. This is normal, and your vision should return to how it was before the laser by the end of the day.

If any of these symptoms last longer than advised, or if you are worried about your eyes, call the Ridley Clinic for advice (contact details are below). You can also visit your nearest accident and emergency department.

What do I need to do after I go home?

We may prescribe anti-inflammatory drops after your laser treatment. These help to minimise inflammation (but not infection) within the eye. People normally only have to take these for a week at most – the doctor will tell you how long you need to take them for. You do not need antibiotics because your eye doesn't have an open wound.

If you are using glaucoma drops, please check with the nurse or the 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.**

You can do all of your daily activities as you would normally without any problems

Contact us

If you develop any of the symptoms featured in this leaflet, or need urgent advice about your eye(s), please telephone the Ridley Clinic:

t: 020 7188 4304 - Monday to Friday, 9 to 5pm, or

t: 020 7188 7188 - Monday to Friday, 9 to 4pm and ask for eye casualty

If you call outside of clinic hours then call 020 7188 7188 and ask to be put through to accident and emergency.

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 9am to 5pm, Monday to Friday

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

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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

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

NHS Choices

Provides online information and guidance on all aspects of health and healthcare, to help you make choices about your health.

w: www.nhs.uk

Leaflet number: 2399/VER4

Date published: October 2017

Review date: October 2020

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A list of sources is available