

Ophthalmology department

Cyclodiode laser treatment for glaucoma

Information for patients, relatives and carers

Introduction

This leaflet has been designed to give you information about the cyclodiode laser treatment to help treat your condition. We hope to answer some of the questions you might have although it is not meant to replace the discussion between you and your medical team. The aim is to help you understand more about what is discussed. If you have any questions about the information below, please contact us.

What is cyclodiode laser treatment?

Cyclodiode treatment uses laser energy. Lasers held outside the eye target tissue that produces the eye's fluid (aqueous humour). This tissue is called the ciliary body. It sits behind the coloured part of the eye (the iris). The aim is to reduce the production of the eye's fluid by destroying some of this tissue. This then reduces the intraocular pressure (IOP) in your eye.

Why would I have cyclodiode laser treatment?

Your eye doctor (ophthalmologist) may recommend the cyclodiode laser treatment to manage your glaucoma when other treatments have not been effective in controlling the eye pressure. (You may have tried eyedrops, medication and surgery).

Eight out of ten (80%) of patients who have had undergone cyclodiode laser treatment had their eye pressures reduced.

Glaucoma is a progressive eye condition characterised by increased IOP. It can damage the optic nerve and lead to irreversible vision loss.

Here are some reasons why you may need cyclodiode laser treatment:

- **combination therapy:** cyclodiode laser treatment can be used in combination with other glaucoma treatments to achieve better IOP control and preserve vision. It can be used with medications or glaucoma surgery called trabeculectomy
- **inadequate response to previous medication or surgery:** if glaucoma medications or previous surgical procedures have not been effective enough to lower your IOP

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- **contraindications to or intolerance to medications:** cyclodiode may be an alternative if you cannot tolerate glaucoma medications. This may be due to allergies or side effects. Also, some medications are contraindicated due to other health conditions
 - **advanced glaucoma:** cyclodiode might be used to help lower IOP and preserve remaining vision in cases of advanced or severe glaucoma, where damage to the optic nerve and vision loss is significant
 - **desire to avoid traditional surgery or poor surgical candidate:** some people may prefer less invasive treatment options over conventional glaucoma surgeries. These surgeries have higher risks of complications and longer recovery times

What are the risks of having the treatment?

As with all forms of treatment, cyclodiode laser treatment carries some risks and complications.

- **bloodshot eye:** your eye may look bloodshot straight afterwards. This is due to the local anaesthetic
- **ocular discomfort or inflammation:** your eye may feel slightly bruised afterwards or become inflamed, red and painful. You will be given eyedrops to treat this
- **damage to surrounding structures:** the nearby lens or cornea can be damaged by the laser energy
- **reduced vision or loss of sight:** very rarely, if the pressure in the eye drops too low, this can result in reduced vision
- **failure of treatment or need for further treatments:** more than one treatment may be needed to bring the IOP down. Sometimes, drops are still needed for long-term use

What are the risks of not having treatment?

If the eye pressure is not well-controlled, further damage to the nerve of the eye is very likely. This will lead to irreversible sight loss. Also, eye pain caused by high IOP may continue.

Are there any alternatives to this procedure?

There are many ways to treat glaucoma, including eye drops, laser and other surgical procedures. Your surgeon recommends options for your glaucoma treatment after carefully assessing multiple factors specific to you including:

- your eye pressure
- stage and type of glaucoma

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- previous treatment
 - other eye condition
 - your general health
 - how easy it is for you to attend follow-up appointments

Your doctor will be able to discuss any specific potential alternatives with you in further detail.

What happens before the procedure?

You will receive instructions to use the appropriate eye drops or oral tablets, or both, as part of your treatment plan until the day of your surgery.

What happens on the day of my procedure?

You will get all the details on your appointment letter.

You will be taken care of by the team at the surgical ward.

The team will meet you before the procedure. They will conduct a few checks before the procedure and answer any queries you might have. They ensure everything is ready for your treatment.

The procedure is generally carried out as a day case procedure and you are not expected to stay in hospital overnight. You may expect to be in hospital for about half a day.

What happens during the procedure?

Cyclodiode laser treatment is typically performed under local anaesthesia and lasts about 15 minutes.

1. We will administer a local anaesthetic injection around your eye. You may have some mild discomfort or feeling of pressure as the anaesthesia takes effect. This injection is essential to prevent pain and excessive eye movement during the surgery. It may make your vision extremely blurred for several hours.
2. You will be asked to lie relatively flat.
3. Your eye will be held open with a small clip.
4. The laser treatment is performed using a pen-like device held against the side of the eye.
5. At the end of the procedure, an injection will be delivered around the eye to prevent the eye from becoming inflamed.
6. The eye is covered with a patch to protect it until the anaesthetic wears off.

What happens after the procedure?

- as the anaesthesia wears off, your vision will return to how it was before the procedure
- your eye may feel sore. If it does, you can take your usual pain relief
- your eye may be red, watery and gritty for a few days. Your vision may be slightly blurred
- **we advise you not to drive on the day of the procedure**

Do I have to use eye drops after the procedure?

You will be given additional steroid eye drops after the procedure. These will help reduce inflammation. You will usually need to continue with your usual glaucoma drops and medication afterwards until your next visit appointment.

What activity is allowed after the procedure?

After cyclodiode laser treatment, you can go about your normal daily activities.

You will be reviewed by your glaucoma team around four weeks after your procedure.

Who can I contact for more information?

- Emergency Department at Western Eye Hospital – 020 3312 3247
- Outpatients at Western Eye Hospital – 020 3312 3236
- Alex Cross Ward. Day care unit – 020 3312 3218/ 9614
- Outpatients at Charing Cross Hospital – 020 3311 1109/ 1233/ 0137

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:
imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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