

# Endoscopic Cyclophotocoagulation (ECP)

Information for patients, relatives and carers

## Ophthalmology Department

① For more information, please contact:

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Ask for operator and then ask for  
ophthalmic nurse or doctor on call

# Introduction

Glaucoma is a disease that damages the optic nerve. The optic nerve sends signals to your brain that are converted into the images that you see. If left untreated, glaucoma will cause a slow but steady loss of vision.

To understand glaucoma, it helps to learn what happens in a healthy eye. In a healthy eye, the amount of fluid made in the eye is equal to the amount of fluid that drains out of the eye. This creates a normal amount of pressure.

In an eye with glaucoma, there is a build-up of fluid. This can happen because of a blockage in the outflow pathway where fluid normally drains out of the eye. The result is a rise in pressure above the normal level which can damage the optic nerve.

Your consultant has recommended you have a laser procedure (ECP) because you have ocular hypertension or glaucoma and your eye pressure needs to be lower.

# What is ECP?

Endoscopic Cyclophotocoagulation (ECP) is a laser procedure. It is normally performed as part of a combined procedure, at the same time as cataract surgery. Although it may be done on its own, if you have already had your cataracts removed.

If you are having a combined procedure and once cataract surgery is completed, an ECP laser tube (probe) with a miniature camera is inserted into your eye. This is done via the small cuts (incisions) made during your cataract operation.

The insertion of the probe/camera enables the surgeon to treat the ring of hair-like structures (ciliary processes) in your eye, which make the fluid in the front of the eye.

The ciliary processes are responsible for the eye pressure. A gentle laser is applied to shrink these structures. This should reduce the amount of fluid produced and the pressure in your eye.

**Note:** The fluid and pressure inside your eyes are not connected in any way to your tears or your eyes watering.

## **What are the benefits of ECP?**

- Studies have shown that ECP laser treatment is effective at lowering eye pressure, which helps to preserve your vision. ECP successfully reduces the eye pressure in 80% of cases.
- In some cases, it may be possible to reduce the number of eye drops that you are using.
- Very occasionally, you may eventually be able to stop all your glaucoma eye drops.

# What are the risks of ECP?

There are a few risks associated with ECP laser treatment:

- After the procedure it is fairly common (one in 100) to have an inflammation in your eye, but this can be controlled with steroid drops and usually settles within a few weeks.
- After the procedure, you may experience some discomfort and be light sensitive for two to three days.
- Your eye may appear red/blood shot or bruised.
- There is a small risk of swelling at the back of your eye (macular oedema). This can be treated with additional prescribed eye drops after the procedure.
- In a few cases (one in 100), your eye pressure could increase and there is a rare risk that your intraocular lens could be dislodged.
- Severe loss of sight caused by infection/raised eye pressure is also a rare complication (one in 1000).

## **Post-operative care**

Anti-inflammatory eye drops will need to be used for four to eight weeks after the procedure. You may be required to attend glaucoma clinic several times during this recovery period.

You will be given written instructions explaining how you can reduce or stop using your eye pressure-lowering glaucoma eye drops.

## **How long do the results of the ECP last?**

The beneficial effect of the ECP laser treatment can last a long time. Your doctor or nurse can give you guidance on how long the treatment might last in your specific circumstances. The laser treatment is usually done only once.

However, the results may vary depending on the type and severity of your glaucoma.

You will be monitored regularly in the meantime. If your eye pressure does rise over time, you may require further eye drops and/or surgery.

Having ECP does not affect the ability to undergo other glaucoma surgery in the future should this be needed.

## **Tell us what you think of this leaflet**

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact Debbie Bargewell, Specialist Nurse, Ophthalmology, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725740.

## **Teaching, training and research**

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

## **Patient Advice and Liaison Service (PALS)**

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email [yhs-tr.patientexperienceteam@nhs.net](mailto:yhs-tr.patientexperienceteam@nhs.net).

An answer phone is available out of hours.

# Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:

[www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/](http://www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/)

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