Department of ophthalmology

Cyclodiode laser treatment (for glaucoma)

A brief explanation of glaucoma and glaucoma treatment

Glaucoma is the name for a group of eye conditions which cause damage to the optic nerve at the back of the eye. This is the nerve connecting and transmitting signals between the eye and the brain.

In glaucoma, the natural fluid which fills the eye cannot drain away properly. This can result in a build up of pressure within the eye. This high pressure can cause loss of vision and, if very high, pain or discomfort.

The aim of glaucoma treatment is to reduce the pressure to a level which is safe for the eye. This can usually be achieved with regular eye drops. If eye drops fail to reduce the pressure, damage to the delicate optic nerve will eventually cause permanent loss of sight. However, there are other options available to reduce the risk of this happening.

Other options to lower the pressure are:

1) Laser treatment (such as cyclodiode treatment – information below) or
2) Trabeculectomy surgery (see separate leaflet)

Your doctor can assess what level of pressure is safe for your eye and the best treatment(s) to achieve this.

Cyclodiode laser treatment

What is cyclodiode laser treatment?

This is a type of laser used in patients with glaucoma where other types of treatment have failed or would be of little use.

How does cyclodiode laser reduce eye pressure?

High eye pressure occurs when more fluid is produced inside the eye than can drain away. Cyclodiode laser treatment can reduce the amount of fluid produced and so reduce pressure inside the eye.
Before the procedure:
Please take all medication as normal or as instructed. Your doctor will advise you on which of your eye drops to use after the procedure.

During the procedure:
This procedure is usually carried out under a local anaesthetic. This means that although you will be awake, the eye will be numb so you will not feel any pain. You do not usually have to stay in hospital – the procedure itself lasts approximately 15 minutes and is carried out in the operating theatre.

After the procedure:
The eye may be covered with a pad after the operation which you should leave on until you get home. We advise that you do not drive on the day of the procedure.

Your eye may be uncomfortable for a few days after the procedure – this can usually be controlled with simple painkillers such as paracetamol. The eye may also be watery and gritty for a few days and the vision may be blurred. You may be given some new drops to use initially to reduce inflammation in the eye. It is important that these drops are used as directed. Your doctors will tell you whether you should continue your usual eye drops or stop them.

You will usually have a check-up appointment within a month of treatment at clinic three to monitor your response to the laser treatment.

What are the risks and benefits?
Any medical treatment involves potential risks. Some of those which apply to this procedure are:

- Pain after the operation.
- Inflammation in the eye.
- In some cases the pressure can be too high or low following treatment
  - High pressure following the procedure may require another treatment session.
  - In some cases reduced vision for up to six weeks
  - In very rare cases persistently very low pressure can cause permanent loss of vision and alter the cosmetic appearance of the eye.
- Very rarely bleeding or infection.

Although these risks may sound worrying it is important to remember that cyclodiode laser treatment is generally successful and well tolerated.
In some patients, cyclodiode laser treatment can have the additional benefit of reducing pain from high pressure. This procedure does not aim to improve your vision.

If you experience any of the following:

- Severe pain
- Sudden loss of vision
- Discharge

You need to contact the hospital on:

- 01223 217778 between 08:30 and 17:00 hours.
- 01223 256336 after 17:00 hours.

We are currently working towards a smoke free site. Smoking is only permitted in the designated smoking areas. For advice and support in quitting, contact your GP or the free NHS stop smoking helpline on 0800 169 0 169.

Help with this leaflet:

If you would like this information in another language, large print or audio format, please ask the department to contact Patient Information: 01223 216032 or patient.information@addenbrookes.nhs.uk

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