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Patient Information Leaflet - Glaucoma Procedures

Cyclodiode Laser

What is cyclodiode laser?

Cyclodiode laser is a treatment used to lower eye pressure (intraocular pressure) in glaucoma. It tends to be used for types of glaucoma where medical or other treatments have been ineffective or are not suitable. Sometimes laser treatment is recommended in order to avoid or delay the need for more invasive surgery.

How does it work?

Raised intraocular pressure can cause progressive damage to the optic nerve leading to loss of vision. Raised pressure within the eye is due inadequate drainage of fluid (aqueous humour). In cyclodiode therapy a laser is used to create very small burns in the ciliary body, the part of the eye that produces aqueous. The aim is to reduce the production of aqueous, which causes the eye pressure to fall.

What happens on the day of treatment?

Although cyclodiode is a short procedure as the treatment takes place in the operating theatre you should plan to spend half a day (morning or afternoon) at the hospital. Cyclodiode is most commonly performed under local anaesthesia with a numbing injection around the eye. Occasionally a general anaesthesetic is used but this will discussed with you prior to admission. Following the anaesthetic the laser is applied through the sclera (the white outer coat of your eye) using a pen like instrument.

At the end of the procedure, an injection of steroid is given to help reduce inflammation that may occur following the laser treatment. A clear plastic shield will be applied over the eye. It is important that you do not drive to the hospital on

the day of treatment so you may wish to arrange for someone to take you home. You will probably need to continue your glaucoma eye drops and will need to use some extra steroid drops for at least two weeks following surgery. Our team will advise you of this before you leave. You will receive an appointment to come back to the clinic usually at about 2 weeks after the procedure.

Are there any risks or side effects of this treatment?

Immediately afterwards your eye may look bloodshot. This may result from the local anaesthetic. Your eye may feel slightly bruised and sometimes can become inflamed. The eye drops will control any inflammation and help to relieve discomfort. You may wish to take a mild painkiller, for example Paracetamol, to relieve this discomfort. If you are already taking painkillers for a different condition continue with these but do not take both.

There is a small risk that the cyclodiode treatment will reduce vision. This could happen if the pressure in the eye goes too low. Studies suggest this happens in about 1 in 100 cases.

How successful is it in lowering the eye pressure?

Over 80% of the eyes treated using cyclodiode laser have a successful lowering of pressure. The effects of the laser can wear off over time but may last for months or years. The treatment can be repeated if necessary.

Contact information

The information in this leaflet is intended as a guide only as each patient's experience will be different. If you require any further information or are concerned about your eye following laser treatment, please contact my secretary at Princess Alexandra Eye Pavilion, the telephone number is 0131 536 4160. If you are unable to speak with my secretary please contact the Acute Referral Clinic (ARC) at the Eye Pavilion on 0131 536 3751. The Acute Referral Clinic is open weekdays from 9.00 am to 5.00 pm. At weekends or out of hours please contact your GP, optometrist, or Accident and Emergency at the Royal Infirmary who will be able to contact a member of our on call ophthalmology team for further advice.