

## PATIENT INFORMATION

# Diabetes and Retinal Laser Treatment

### Diabetes and Laser

As a diabetic patient you may require laser treatment to your eyes. This leaflet is intended to provide information on what the treatment involves and why it may be needed.

### Where do I go for the laser treatment?

Currently laser treatment is performed in the Laser Suite within the Eye Clinic on Level 2. Report to Reception in the Eye Clinic.

### Why do I need treatment?

Changes to the back of the eyes in diabetes are known as diabetic retinopathy. There are two main types of problems in diabetic retinopathy that require laser.

1. Diabetic Maculopathy.
2. Proliferative Retinopathy.

Both of these indicate a risk to vision that is reduced with treatment.

### Will laser treatment improve my vision?

Usually no, laser is used in diabetes to try to maintain vision. Screening of diabetic eyes is performed to look for changes in the eye that threaten the vision. If these changes are found then laser treatment may help preserve the level of vision.

### How does laser treatment work?

The laser machine is used to create a small mark on the retina – the light sensitive part of the eye (like the film in a camera).

In diabetic maculopathy this may be used to treat a small area of leaking blood vessels, usually close to the centre of vision. This can help prevent fluid accumulating, which worsens vision. The risk of substantial decrease in vision is reduced by 50% at 3 years after treatment.

In proliferative retinopathy it may be used to treat a large area of retina. This is usually away from the centre of vision. This aims to prevent the development of harmful new blood vessels which may bleed into the eye. This treatment is shown to reduce serious visual loss at 3 years by around 75% in this group.

## **How long does the treatment take?**

Overall you will usually be with us for 2 to 3 hours. Before we begin we will check your vision then use dilating eye drops to open up the pupils. The treatment itself is fairly quick, lasting 10 to 30 minutes.

## **What happens in the laser room?**

You sit at a slit lamp – the same sort of microscope machine as used in clinic. You will have a drop to numb the eye then a contact lens is applied to the eye. The laser treatment involves a number of bright flashes. During this time it will be important that you stay still.

## **Is it painful?**

Laser treatment is usually painless; however some people experience a variable amount of discomfort.

## **When can I drive again?**

The treatment will leave the eye 'dazzled' so we ask you not to drive the same day as treatment. The dazzle wears off over a few hours but sometimes can take a day or two to resolve. You need to inform the Driver & Vehicle Licensing Agency (DVLA) that you have had laser treatment. (After 1<sup>st</sup> episode only)

## **What are the risks of laser treatment?**

Laser treatment does have some risks.

The most serious risk is if the laser burn hits the central part of the retina. This can cause permanent damage to the vision.

This is thankfully a rare occurrence.

A more common problem is that the vision may worsen despite correct laser treatment. It is important to realise this limitation of the laser treatment and to try and control the diabetes as well as possible. Good diabetic control is known to slow the changes to the eye.

After laser treatment some people report a slight worsening of night vision with things generally a bit darker.

Recurrent laser treatment may also reduce your peripheral visual field. The DVLA may request that you undergo specific visual fields tests to confirm that you remain fit to drive.

Overall, we recommend treatment only if we think the risks of not having treatment are greater than the risks of the laser treatment.

## **Will I need more laser treatment?**

Most people who need laser treatment will have laser more than once. This may be weeks, months or years later and will be different for each patient.

**Eye Department Menu** – 01803 655088 (Monday to Friday 9am – 5pm)

**DVLA** 08702 400009

**Diabetes UK** – Careline 0345 123 2399 [www.diabetes.org.uk](http://www.diabetes.org.uk)

**Royal College of Ophthalmologists** [www.rcophth.ac.uk](http://www.rcophth.ac.uk)

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For further assistance or to receive this information in a different format, please contact the department which created this leaflet.