



# **Laser Treatment for Diabetic Retinopathy**

**Your Questions  
Answered**

**Patient Information  
Leaflet**

## **Diabetic Retinopathy and Laser**

An examination of your eyes has shown that your diabetes is affecting the back of your eye. The blood circulation to the back of the eye is poor, which is causing new abnormal fragile blood vessels to grow. If these abnormal blood vessels are not treated they will bleed and cause your vision to get worse leading to risk of long term problems with your sight.

### **Why am I being offered laser treatment?**

Following thorough examination of your eye, your doctor has decided that the best treatment to stabilise the changes in your eyes caused by your diabetes is laser treatment. A course of laser treatment may involve one or more visits to the laser clinic before the changes are controlled.

### **What is laser treatment?**

It involves focusing an intense beam of light onto areas at the back of your eye affected by your diabetes. The laser will shrink the abnormal blood vessels and/or reduce fluid.

## What are the risks?

There is a risk of complications with laser treatments. These are rare and include, but are not limited to:

- Loss of central vision is 1 in 300 cases.
- Reduction in colour vision and/or night vision
- Accidental laser burns to the very center of your vision. You may find it difficult to keep still or may accidentally look at the laser when it fires. If we feel that the risk of this happening is too high, we will stop your treatment.
- Occasionally, a laser burn to your retina may result in new blood vessels growing that may bleed and cause scarring; the damage can result in permanent loss of vision for that area.
- If you need an intensive course of laser treatments, you may notice temporary worsening of your sight due to the macula (area responsible for detailed central vision)

becoming waterlogged. This usually resolves but can warrant further treatment for some people.

- Occasionally some people can have a bleed into the jelly that fills the eye (the vitreous). If you notice a shower of floaters or if your sight gets worse, you should contact the hospital on the phone numbers written at the back of this leaflet.

## **How successful is laser treatment?**

If laser treatment is given when the changes are at the correct stage, it is very effective. Best results are achieved if laser treatment is applied before any vision is lost. The treatment does not generally improve and it rarely restores vision. A small number of patients lose vision despite timely laser treatment.

## **What will happen if I don't have laser treatment?**

Without this treatment there is a greater risk of bleeding, resulting in loss of vision.

## **What does laser treatment for diabetic eye disease involve?**

When you arrive at the clinic a nurse will check your vision. Eye drops will be put into both your eyes to dilate your pupils. You will be asked to sign a consent form.

Once you are in the laser room, eye drops will be put into your eyes to numb the surface. You will be seated in front of a machine, alike to the machine used to examine your eyes. The doctor will place a contact lens on the eye, this is to hold your lids open and will also focus the laser beam onto your retina. The lens will be removed after you have had the treatment.

The laser treatment itself takes between 10 and 30 minutes depending on the amount of laser required. It involves focusing an intense beam of light onto affected areas at the back of your eye which will shrink the abnormal blood vessels and/or reduce fluid. You may find that the flashing lights are very bright and you will hear beeping/clinking sounds during the test. We will ask you to remain as still as possible during the test to make sure that the laser goes in the right place.

## **Will I feel any discomfort?**

Usually the treatment is not painful. Sometimes the treatment will cause an uncomfortable sensation when certain areas of the retina are treated. This will happen where nerves run under the retina. The doctor who is performing your laser cannot see these nerves.

If you have had laser treatment previously and have felt discomfort, ask the doctor to give you some painkillers before the treatment starts, or take these yourself an hour before your appointment.

## **What if I cannot tolerate the laser?**

Should you feel that you need to have a break then alert the doctor before moving away from the machine. Sudden movements can cause the laser to go onto the wrong area of the eye. Please raise your hand before moving or use an agreed signal.

## **What should I expect after the laser treatment?**

Following the treatment your eyes may be dazzled and your sight may seem darkened for several minutes. It can help to wear dark glasses on your way home after the treatment.

Your sight will normally return to its previous level over the next few hours and you will be able to continue your normal activities the next day.

If you have had a lot of treatment, your eyes may ache, this can be helped by taking painkillers such as paracetamol.

## **Can I eat or drink before the test?**

It is important that you eat and drink as normal on the day of the appointment.

## **Can I drive after the laser?**

In order to perform the laser we will need to instil eye drops to dilate the pupils. These drops may blur your vision for up to 9 hours. Therefore we advise that you do not drive after the test. It is advisable to bring someone with you on the day.

## **Follow up**

Before you leave you will be given a follow-up appointment.

Most patients retain good vision following laser treatment; however, regular review is advisable to monitor your condition. Maintaining good control of your blood sugars and your blood pressure is essential in managing your diabetic retinopathy.

We hope that this information is helpful to you. If anything is unclear or you have any other questions you would like to ask, then please do ask the nurse/doctor before the procedure.

**If you have any concerns following  
your treatment please contact:**

**Diabetic Retinopathy Screening  
Service**

**01 6343613**

**Between 8am and 4pm**

**Monday, Tuesday, Wednesday  
& Friday**

**Or**

**Accident and Emergency  
Department**

**01 7088535**

**Revision History**

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