

# Patient Information Sheet

## Laser Treatment for Proliferative Diabetic Retinopathy

### Introduction

The information in this leaflet includes commonly asked questions about laser treatment which you may wish to discuss with a relative or carer.

The aim of the laser treatment is to stabilise the changes caused in your eyes by your diabetes. Generally, treatment does not improve your sight however there have been some cases where it has.

If you have any further questions after reading this leaflet, please speak to your eye specialist. There is a section at the end of this leaflet where you make a note of any questions you have.

### Why am I being offered laser treatment?

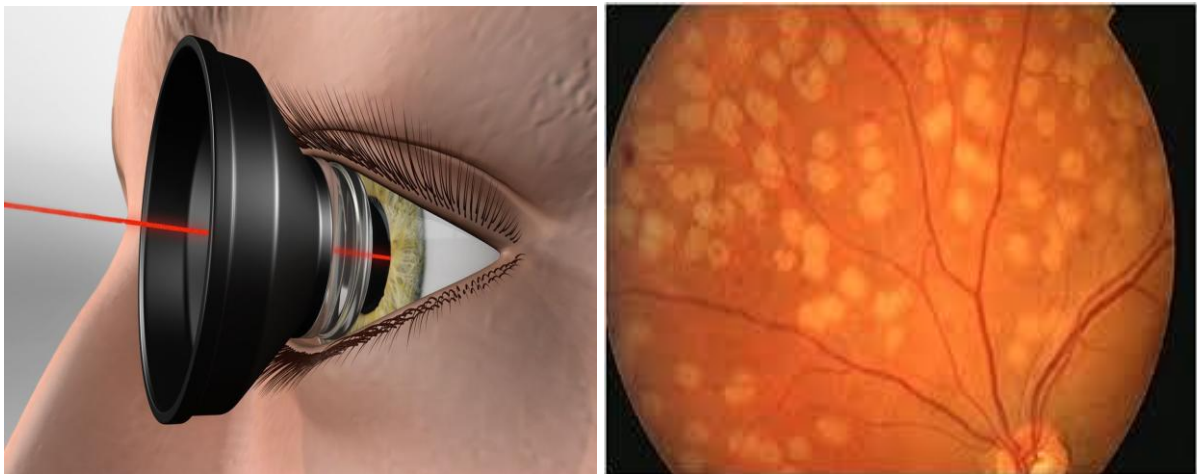
An examination of your eyes has shown that your diabetes is affecting the small blood vessels in your retina and that you are at risk of long-term problems with your sight.

### What is the treatment for proliferative diabetic retinopathy?

- Sometimes, advanced diabetic retinopathy in the eyes can cause small abnormal blood vessels to grow either from your optic nerve or from one of your normal blood vessels in the retina.
- If not treated, these abnormal blood vessels can bleed. This can result in problems with your vision such as black blobs or floaters and possibly reduced vision.
- If left untreated, there is also a risk that scar tissue can grow. This can pull on the retina and could lead to a detached retina.
- Laser treatment for abnormal vessels reduces the risk of scarring and helps to stabilize the retinopathy.

## Preparing for the treatment

- You may be required to attend one or more outpatient laser clinic appointments before the changes are stabilized.
- Please bring with you dark glasses to wear to go home after the treatment.
- You will need to arrange for someone to bring you to the appointment as you should not drive following treatment.
- Following an eye-sight check, eye drops will be used to dilate both your pupils at each visit, although only one eye may be treated.
- Your doctor will discuss and agree any treatment with you.
- **Before any treatment, you will be asked to sign a consent form to ensure that you understand what the treatment involves including any risks.**
- You will then be taken to a laser treatment room, and numbing drops will be put into your eyes to numb the surface.
- A special contact lens will be placed onto your eye to allow the laser beam to be focused on the back of your eye (retina). (see image below). This lens also keeps your eye lids open and stops them from blinking.



- An intense bright beam of light is focussed onto your retina where the laser treatment is required. You will notice intermittent flashing of this bright light. Depending on how much laser is required will depend on how long this will take. Your sight may seem darkened for some time after completion of treatment.
- Once the laser is completed, the special contact lens is removed

## Managing discomfort during treatment

Treatment is not usually painful however you may feel a sharp prickly feeling when certain areas of the retina are treated such as the nerves under the retina.

If you have had this laser in the past, you may feel some discomfort during treatment and you can take a mild painkiller such as paracetamol one hour before treatment to help with this.

## After the Laser Treatment

- Your sight will return back to your normal level usually after 4 hours.
- You can return to normal activity and work the next day.
- Your eyes may ache if you have received a lot of treatment. Mild painkillers can be taken, such as paracetamol to help ease any pain.
- If you have any new eye problems after your laser treatment, please seek medical advice.

## Risks of laser treatment

As with most treatments there are some risks which include:

- Difficulty with **night vision**.
- **Peripheral vision** (the outer field of vision) can be affected in one or both eyes. (1 in 5 people). Some may have to stop driving (3 in 100) if peripheral vision is reduced.
- Your **eye sight may worsen** temporarily if you have had an intensive course of laser treatment. This is due to the macula (small highly sensitive central area of the retina) becoming waterlogged. This usually sorts itself out with only a small number of people needing treatment.
- **Bleed into the jelly of the eye** (vitreous). This can happen occasionally and you may notice lots of floaters, black spots or vision deterioration. If this happens, contact the eye emergency clinic.

## What if the laser treatment does not work?

- Laser treatment is the only proven treatment for diabetic retinopathy and is very effective if given when the changes are at the correct stage.

It can prevent severe sight loss in 9 out of 10 people and in most cases, driving vision is preserved. It is likely however that you may require additional treatment by injection alongside the laser treatment which will help to stabilize the retinopathy.

- Sometimes the damage to the very small blood vessels in the retina are so far gone that the laser treatment does not work. A special intravenous dye test called ‘fundus fluorescein angiography’ is sometimes recommended to assess the circulation in the eyes.
- If your diabetic eye disease is very aggressive, the changes may be moving too fast for the laser to control them. Making sure your blood glucose and blood pressure are at their best levels can help to slow the process. Regular visits to your GP or diabetes doctor should be made to monitor this.
- An operation on the eye or regular injections can be considered if laser treatment does not work for you. A referral can be made to a vitreoretinal surgeon to discuss your options.

## Information and resources

Please read ‘Diabetic Retinopathy – the facts’. This explains the changes in more details.

[www.nhs.uk/conditions/diabetic-retinopathy/](http://www.nhs.uk/conditions/diabetic-retinopathy/)

[www.nscretinopathy.org.uk](http://www.nscretinopathy.org.uk)

[www.diabetes.org.uk](http://www.diabetes.org.uk)

[www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)

[www.mib.org.uk](http://www.mib.org.uk)

## Contact Details

**Eye Emergency Clinic (01782) 674300**

Between 9am and 6pm Monday to Friday

Weekends 9-12 midday

**Use the space below to write down any questions you have**


**Please speak to a member of staff if you need this leaflet in large print, braille, audio or another language**