

# Patient Information

# Argon laser pan-retinal photocoagulation (PRP) treatment

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## Introduction

Your eye doctor has found that your diabetic eye disease (retinopathy) has now worsened. The retina of your eye is not getting enough oxygen and has started to develop new blood vessels on its surface. This unfortunately is not good news, as these new vessels serve no useful purpose. Being fragile, they can rupture and bleed inside the eye. This will cause a sudden loss of vision.

If the new blood vessels grow on the surface of the iris (the coloured part at the front of the eye), they can block the drainage of fluid out of the eye (see figure 1 on the following page). This can cause the pressure inside to build up to high levels fairly quickly. This is very painful and can also cause a permanent loss of vision.

Your eye doctor has already given you a patient information booklet about diabetic eye disease and its treatment. This leaflet contains detailed information on a treatment with the medical name argon laser pan-retinal photocoagulation (PRP) treatment. It includes information on the procedure and its benefits and risks.

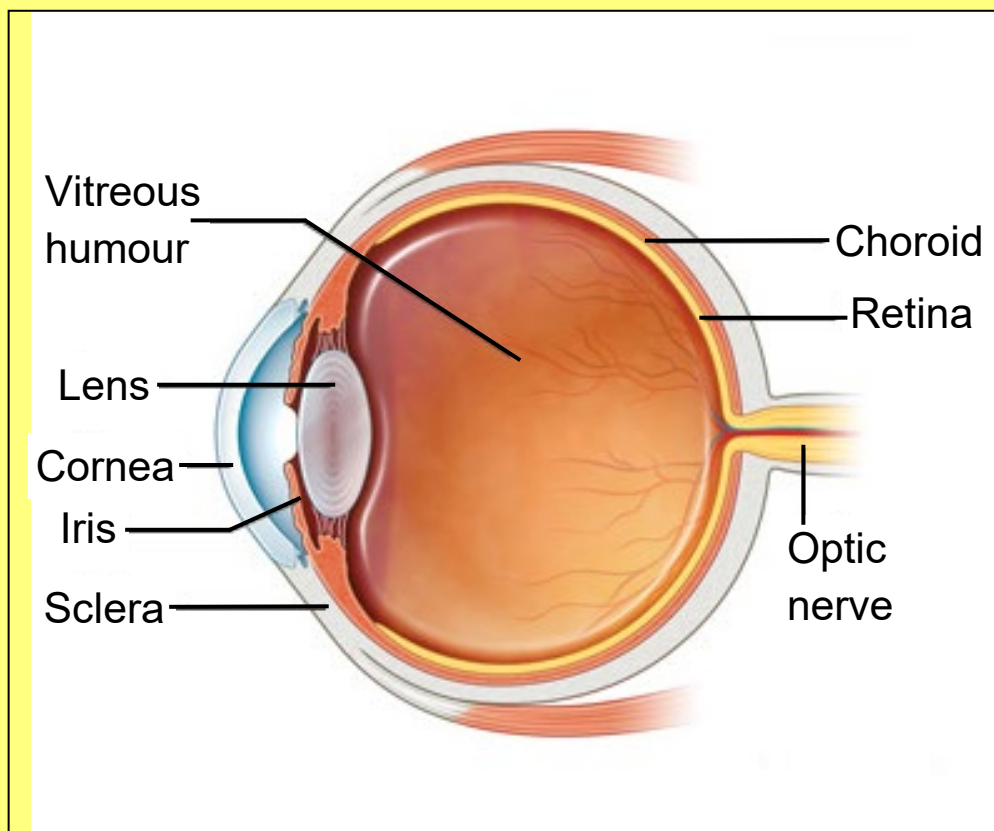


Figure 1 shows the side image of an eye (image courtesy of NHS Choices).

### **What is argon laser PRP treatment?**

It is a type of laser treatment that helps to get rid of the unneeded blood vessels. The laser is a focused beam of light energy of a specific wavelength. It is applied as spots on the back of your eye. This should make the blood vessels shrink and disappear. The treatment is usually performed over one to three sittings.

### **What conditions are most frequently treated with PRP?**

- Proliferative diabetic retinopathy
- Central retinal vein occlusion
- Sickle cell disease

### **What are the benefits of the treatment?**

The treatment should help to get rid of the new blood vessels. This should reduce the risk of bleeding in your eye in future. This will help lower the risk of you losing your eyesight. However, please note that the treatment is not carried out to improve your eyesight.

## **What are the risks?**

- Laser treatment may cause your central vision to become worse. This is usually temporary and rarely permanent.
- This treatment reduces your peripheral vision (your side vision). This can affect your fitness to drive. You will have to inform the Driver and Vehicle Licensing Agency (DVLA), especially if you have had this treatment more than once in both eyes.
- It can make your night vision worse, and your sight may take longer to adapt in darkness. This may affect your ability to drive at night. You will need to decide if you are safely able to drive at night after having this treatment.

## **What are the alternative treatment options?**

Alternative treatments include injections into the eye of steroids, steroid implants or a medication called anti-vascular endothelial growth factor (anti-VEGF). These treatments carry higher risks. Some of these are licensed for use, while others are not yet licensed. These may become available on the NHS in the future. Please discuss this in more detail with your eye doctor.

## **What happens if I do not have this treatment?**

The new blood vessels will continue to grow and cause severe and persistent bleeding, scarring and retinal detachment, together with irreversible (permanent) loss of vision.

## **What happens before the procedure?**

There is no special preparation before the procedure. However, please note that you will not be able to drive after the procedure or for the rest of the day. For this reason, you will need to arrange for someone to drive you home.

You should not wear contact lenses to the appointment.

## **What happens during the treatment?**

A nurse will put drops in your eyes to make the pupils of your eyes big.

After these drops have taken effect, the eye doctor will put numbing anaesthetic drops into your eye. When your eye is numb, the eye doctor will put a contact lens into your eye.

You will not have to worry about keeping your eyes open during the treatment, but it would help if you could look in the direction that your doctor asks you to. You will see bright flashes of light in quick succession as the laser spots are applied. Up to a thousand of these spots may be applied in one sitting. The procedure will be completed in about 20 minutes.

This type of laser treatment is not a completely painless procedure. You will feel an occasional sting from the laser when it is applied, but it should not be very painful. If you have a second treatment, this is sometimes slightly more painful.

It is important that you remain still during the procedure. Movement can be dangerous as it may direct the laser to the wrong part of the eye.

If you wish to draw attention, please knock the table or say “stop” and the doctor will stop immediately.

You will not need any stitches and you will not need to stay in hospital after the treatment.

## **What happens after the treatment?**

The bright flashes of light from the laser, and the fact that your pupils have been made larger will leave you dazzled for a few hours.

We recommend that you go straight home and have a good rest. If you get a headache afterwards, take a painkiller such as paracetamol, if you can take them, or other painkillers that you are used to taking (always read the label; do not exceed the recommended dose). Most patients can continue with their usual daily activities the following day.

If you feel your vision is reduced, or you have floaters or flashing lights, please ring the Urgent Referral Clinic at Russells Hall Hospital Eye Clinic on **01384 456111 ext. 3633 (9am to 4.30pm, Monday to Friday)**.

## Can I find out more?

You can find out more from the following web-link.

### **RNIB**

<http://www.rnib.org.uk/eye-health-eye-conditions-z-eye-conditions/understanding-eye-conditions-related-diabetes>

## What if I have any problems or questions after reading this leaflet?

If there is anything you do not understand, or you are concerned or worried about any part of the treatment, contact:

The **Urgent Referral Clinic** team at Russells Hall Hospital Eye Clinic on **01384 456111 ext. 3633**.

### **Eye emergency, out of hours**

In case of an eye emergency after the closing hours of the Eye Clinic at Russells Hall Hospital (including weekends and bank holidays), please contact:

### **Birmingham and Midland Eye Centre on 0121 507 4440**

The doctor on call is usually based at the Eye Centre, City Hospital, Dudley Road, Birmingham. They may need to call you back, and if necessary, they will arrange for you to visit them.

**Note:** The information in this booklet is provided for information only. The information found is **not** a substitute for professional medical advice or care by a qualified doctor or other health care professional. **Always** check with your doctor if you have any concerns about your condition or treatment. This is only indicative and general information for the procedure. Individual experiences may vary and all the points may not apply to all patients at all times. Please discuss your individual circumstances with your eye doctor.

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**This leaflet can be downloaded or printed from:**

<http://dgft.uk/services-and-wards/ophthalmology/>

**This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.**

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